

# SEQUENCE LISTING

<110> ChondroGene  
Liew, Choong-Chin

<120> Method for the Detection of Gene Transcripts in Blood and Uses  
Thereof

<130> xx

<150> US

<151> 2000-01-04

<150> US 60/115,125

<151> 1999-01-06

<160> 112

<170> PatentIn version 3.2

<210> 1

<211> 110

<212> DNA

<213> Human

<400> 1

acacaacgta acaataacat atttagccaa thtagtagac tgctatataa tacattagag 60

tgtaattca ttccgtttac agccccattg ggtgtcaaat ttttttggt 110

<210> 2

<211> 530

<212> DNA

<213> Human

<220>

<221> misc\_feature

<222> (16)..(16)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (19)..(19)

<223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (25)..(25)  
5 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (38)..(38)  
10 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (40)..(40)  
15 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (42)..(42)  
20 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (44)..(44)  
25 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (64)..(66)  
30 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (70)..(71)  
35 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (81)..(81)  
40 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (86)..(86)  
45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (89)..(89)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (117)..(117)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (121)..(121)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (123)..(123)  
 <223> n is a, c, g, or t  
 20  
 <220>  
 <221> misc\_feature  
 <222> (135)..(135)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (143)..(143)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (177)..(177)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (179)..(179)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (181)..(181)  
 <223> n is a, c, g, or t  
 45  
 <220>

<221> misc\_feature  
<222> (193)..(194)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (209)..(210)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (215)..(215)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (217)..(217)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (221)..(221)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (228)..(228)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (233)..(233)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (236)..(236)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (243)..(243)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (251)..(254)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (270)..(270)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (272)..(272)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (274)..(275)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (283)..(283)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (292)..(293)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (299)..(299)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (303)..(303)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (307)..(307)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
<222> (312)..(312)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (319)..(319)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (324)..(325)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (328)..(329)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (342)..(342)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (345)..(345)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (366)..(366)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (377)..(377)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (382)..(382)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (391)..(391)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (395)..(395)

5 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (400)..(400)

10 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (412)..(413)

15 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (422)..(422)

20 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (424)..(424)

25 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (426)..(426)

30 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (433)..(433)

35 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (439)..(439)

40 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (442)..(442)

45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (452)..(452)  
 <223> n is a, c, g, or t

5

<220>  
 <221> misc\_feature  
 <222> (460)..(460)  
 <223> n is a, c, g, or t

10

<220>  
 <221> misc\_feature  
 <222> (463)..(463)  
 <223> n is a, c, g, or t

15

<220>  
 <221> misc\_feature  
 <222> (471)..(471)  
 <223> n is a, c, g, or t

20

<220>  
 <221> misc\_feature  
 <222> (495)..(495)  
 <223> n is a, c, g, or t

25

<220>  
 <221> misc\_feature  
 <222> (500)..(500)  
 <223> n is a, c, g, or t

30

<220>  
 <221> misc\_feature  
 <222> (504)..(504)  
 <223> n is a, c, g, or t

35

<220>  
 <221> misc\_feature  
 <222> (516)..(516)  
 <223> n is a, c, g, or t

40

<400> 2  
 gcctgttcta tacagnttnt aaatntcatt tcagatcntn tntntgtgat aatgaatgct 60

gttnnntagn natectatat natgtncgna cacatcctaa agcataggat gaaaaantga 120

45

nanccttagg atttngagca cantgccttt acctgaatat atacagcaca gtcttgnant 180



ncctggcgtg tgnnactgga gatctctann aaaangnata nagtgggngg gcncntniggc 240

gcntgccggt nnnncctaaa ttttcccan gngnnggagg ccngtcacct gnncccatng 300

5 cgntctngac cngcctgtna acgnntanng gagccttagt cncnctaaa aacacaaaat 360

tagccnggca tgggggntgg gncccttgta ntctnagctn cttgggaggc tnngccagga 420

10 antncncttg aanccgggna gnggggtggcc tnaagtttgn ggnaaggcca ntgatcaccg 480

cccttcccc tccangcccn gggngaaggg atttgngact tccgttttgg 530

15 <210> 3  
<211> 215  
<212> DNA  
<213> Human

20 <400> 3  
cggcacgagg atcaatttgc cttggaagaa caaaaggaaa gtctggaaat gcagaaagta 60

tggatgctga accacataac agcagatggc attgctgtga agtatactgg atggaatata 120

25 ttcaagcgtt aatatttaat tcttttgtg gaaggtcaca caattaaaat ttaattgggc 180

atggaggctt aggacggggt aaaaaagtct ttaga 215

30 <210> 4  
<211> 129  
<212> DNA  
<213> Human

35 <400> 4  
gtttctttt cctaaaacgg tttatttaa ctcaatgtgt caaagtttt ttttaataat 60

cccaagaggg atgaagccgt gtccacaggg atatatacat cattatggtt cccatcttcc 120

40 atacatgaa 129

<210> 5  
<211> 361  
45 <212> DNA  
<213> Human

5       <220>  
          <221> misc\_feature  
          <222> (13)..(14)  
          <223> n is a, c, g, or t

10       <220>  
          <221> misc\_feature  
          <222> (16)..(16)  
          <223> n is a, c, g, or t

15       <220>  
          <221> misc\_feature  
          <222> (20)..(21)  
          <223> n is a, c, g, or t

20       <220>  
          <221> misc\_feature  
          <222> (25)..(28)  
          <223> n is a, c, g, or t

25       <220>  
          <221> misc\_feature  
          <222> (42)..(42)  
          <223> n is a, c, g, or t

30       <220>  
          <221> misc\_feature  
          <222> (52)..(52)  
          <223> n is a, c, g, or t

35       <220>  
          <221> misc\_feature  
          <222> (55)..(55)  
          <223> n is a, c, g, or t

40       <220>  
          <221> misc\_feature  
          <222> (57)..(57)  
          <223> n is a, c, g, or t

45       <220>  
          <221> misc\_feature  
          <222> (59)..(59)  
          <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (63)..(63)  
5 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (65)..(65)  
10 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (68)..(68)  
15 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (72)..(72)  
20 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (74)..(74)  
25 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (77)..(77)  
30 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (91)..(91)  
35 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (102)..(102)  
40 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (117)..(117)  
45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (127)..(128)  
 <223> n is a, c, g, or t

5

<220>  
 <221> misc\_feature  
 <222> (169)..(169)  
 <223> n is a, c, g, or t

10

<220>  
 <221> misc\_feature  
 <222> (172)..(172)  
 <223> n is a, c, g, or t

15

<220>  
 <221> misc\_feature  
 <222> (192)..(192)  
 <223> n is a, c, g, or t

20

<220>  
 <221> misc\_feature  
 <222> (203)..(203)  
 <223> n is a, c, g, or t

25

<220>  
 <221> misc\_feature  
 <222> (243)..(244)  
 <223> n is a, c, g, or t

30

<220>  
 <221> misc\_feature  
 <222> (248)..(249)  
 <223> n is a, c, g, or t

35

<220>  
 <221> misc\_feature  
 <222> (253)..(253)  
 <223> n is a, c, g, or t

40

<220>  
 <221> misc\_feature  
 <222> (283)..(283)  
 <223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
<222> (288)..(288)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (299)..(299)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (318)..(318)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (327)..(327)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (334)..(334)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (348)..(348)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (359)..(360)  
<223> n is a, c, g, or t

35 <400> 5  
gggggctttt tnnancggn nccgnnnncc ctctctggga anttttgggc cnttntntna 60  
aangnggnct tncnggnaaa tgggtttttt nagggggctg gncaaaggtt tttctntaa 120  
40 tgggatnngg ccggcatttt aaaaaaaccc gctttggcct ttttgctana tnggaaaaaa 180  
tttttttaa angcctaaga canggttttc ccttcatatg ccaaacttgc cctaacattt 240  
ggnnttttnng ggngggcagg gggggatttt taaaccggat tnggggtnaa aaaaaatcng 300  
45 gggggaattt ttgggganaa aaccttnggg gggnccccct ttgaaaanaa aggttggggn 360

g

361

5   <210> 6  
       <211> 839  
       <212> DNA  
       <213> Human

10   <220>  
       <221> misc\_feature  
       <222> (475)..(475)  
       <223> n is a, c, g, or t

15   <220>  
       <221> misc\_feature  
       <222> (556)..(556)  
       <223> n is a, c, g, or t

20   <220>  
       <221> misc\_feature  
       <222> (559)..(559)  
       <223> n is a, c, g, or t

25   <220>  
       <221> misc\_feature  
       <222> (585)..(585)  
       <223> n is a, c, g, or t

30   <220>  
       <221> misc\_feature  
       <222> (606)..(606)  
       <223> n is a, c, g, or t

35   <220>  
       <221> misc\_feature  
       <222> (644)..(644)  
       <223> n is a, c, g, or t

40   <220>  
       <221> misc\_feature  
       <222> (671)..(671)  
       <223> n is a, c, g, or t

45   <220>

<221> misc\_feature  
<222> (693)..(693)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (695)..(695)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (714)..(714)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (742)..(742)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (744)..(744)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (756)..(756)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (765)..(765)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (768)..(768)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (808)..(808)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (815)..(815)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (823)..(823)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (830)..(830)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (837)..(837)  
<223> n is a, c, g, or t

<400> 6

20 ctctgtgccga attcggcacg agcaaagtac ctggacttta tggaatcctt ctatacttca 60  
  
ttgtcaatca tttattggtt ctaaaaagga tcggacaatg tgctatttca gggaagccaa 120  
  
tgttttggag taaatgcac aaataatttc tcttgccctg caaacacatt ttttttctg 180  
25 tcattgcaat gtgcacaaag ggccacgagg atctacaaga aagcctgcct tattctgacc 240  
  
aggagtgggg agctgacaag aggcttcaca gagcaggatga tgtttagaga ggaatgtctc 300  
  
ccatttecta gtgcctgtg aggtctcaa aaccgggaat caagttccc ttctgaactc 360  
  
agtctcaat cgtgtaggga tagggttccc aggtgtgcct ctatgtgtag aggtctatt 420  
  
ataccctgga tacacattga tatgcatgtg caatgctgga atcaccagcc cccangtctc 480  
35 cctcccaaat gtgcatgttt ttgacccat gtcacattta attttttt tcaattgacg 540  
  
ggtttttagg gcaaantnnc caaaacatcc cccactttgc catantcccc tgcattcca 600  
  
tattgncttg cactgacatg attcactcat tgatattgcc tgnngcgttc ctatggcctt 660  
  
tgagtttgca nactgggttt gggggaaacc cangnaaaaa aacctcttg aaanggggaa 720  
  
ccccccaat ggtgggggaa ananaactgg acttntttg ggagnccnga attgtctctt 780  
45 gaccaggcag ggacctggga ccctgaangc tttntaatc ttnggggcn gaaaatntg 839



<210> 7  
 <211> 118  
 5 <212> DNA  
 <213> Human  
  
 <400> 7  
 atgggaaagt gtgtaagatt tagaaaaagc attaactatt agtaaacttt atcttaagct 60  
 10 ctaacctttg attaggtccc acaaaaatta ggtgatatgc aatttctaatt ttagggcc 118  
  
 <210> 8  
 15 <211> 197  
 <212> DNA  
 <213> Human  
  
 <400> 8  
 20 gtgtgcagtga gccgagatca taccactgca ctccagccta ggcaacagag cgagactcgg 60  
 tcaaaagaaa aaaaaaaagg ggagctgggc gtgggtacta atgccgtaat cccaggcctt 120  
 tgggaatccc aggcaagggtg gcctttaggg caaggagttc ggaacctccc tgctaacagg 180  
 25 taaacccctt ttcctt 197  
  
 <210> 9  
 30 <211> 250  
 <212> DNA  
 <213> Human  
  
 <400> 9  
 35 gagaccaagg ccgccccgct ctggtctcag accagttgtg ctgctcttgc tctggctcag 60  
 ctggtgtggg gcgcaggcgg gaaacgagac ctctagcatc tggctgaagg ctctgccaag 120  
 ctctcttca gggctgcagt ctgcctgcct gcatataccg acttggccag aactgctgc 180  
 40 taaattccag ggactcttcc tcccctctc tgctctccag ccaatccttg aggatttaat 240  
 aactggaagg 250  
 45 <210> 10

<211> 680  
 <212> DNA  
 <213> Human

5

<220>  
 <221> misc\_feature  
 <222> (433)..(433)  
 <223> n is a, c, g, or t

10

<220>  
 <221> misc\_feature  
 <222> (600)..(600)  
 <223> n is a, c, g, or t

15

<220>  
 <221> misc\_feature  
 <222> (615)..(615)  
 <223> n is a, c, g, or t

20

<220>  
 <221> misc\_feature  
 <222> (626)..(626)  
 <223> n is a, c, g, or t

25

<220>  
 <221> misc\_feature  
 <222> (645)..(645)  
 <223> n is a, c, g, or t

30

<220>  
 <221> misc\_feature  
 <222> (661)..(661)  
 <223> n is a, c, g, or t

35

<400> 10  
 caccaaagaa gcaagagggc ttcttttgt ttctggggac aataactaac ttaatttgc 60

40

tctcaagaa gaaggaagct gggtatatag gggaatggca gaagtgtctg cagatgaacc 120

atgaggagca tggctcttaa gaacatgctg agaaggaagc aacacagact ccatcactgg 180

gggaagcacc tgaatagagc actggtaaag gccagtctgt ggacctgagg ccagaggaga 240

45

tgccaggggt ccagatttca tggcccacag aaacggaact gatcatattt ggttgctggc 300

cagtgttcca tagaccaaga aggctggtag caagtataga ttctctaca tagcttgaca 360

ggagaagaga aaggggaatg tagcacacag gatgcagcag gtgaataaga aaacctcctt 420

5 ttcccagggtt ggngacagtg agtgatctac agtgatactc aaaagattgt gattgggtgtg 480

ggaattcctg tctcaatatg caatctgcca agaaaacact gtgatggttt cctgtaaagt 540

aacctcttt tcttatctct aatttcacaa gactcttaaa tgagaggggg gggagaaagn 600

10 gttctttctc actcncctaa aactgnggggt ctgcctggag aaaantaca tctgcacaga 660

naatgctggt tagccaggaa 680

15 <210> 11  
<211> 318  
<212> DNA  
<213> Human

20 <400> 11  
cctgcagagt actccatgga aacaattgcc gagcacgtgc tcgcaattg ccgagcacgg 60

tccggttga actcctagac taagactagg taggtgatac ataccttctt cccaccaagt 120

25 actcacgac caaactatga atttagatt cggatcaaac gaggattgat ccgagggacc 180

aacgttgtga taaatcttac gtcgtcttat atattaagtt ttgtggagg atcggataag 240

30 tctatagtgt ttgtcacaga tagtcccgtg ccacacccca gaccatagga gtcgctctcc 300

ggaccgcggt ctaatggg 318

35 <210> 12  
<211> 155  
<212> DNA  
<213> Human

40 <400> 12  
tctcacattg gacatactca aaattcactt ataattctca caccacaaa aacttacca 60

tatcaaatta taaaccacc cacattactt aaaattttt acatttcca ataaaaaacc 120

45 caaataaaca aaaacttcca atctccattt aaaat 155

<210> 13  
 <211> 125  
 <212> DNA  
 5 <213> Human  
  
 <400> 13  
 aataaacaaa catgccctct aatatatgaa ttcacacac aacacgcaca ctgtcccccac 60  
 10 aaacaccttt ttggtgtcaa gaagaaaaag actagcttca ctgaacagag aaatgctgga 120  
 cagtg 125  
  
 15 <210> 14  
 <211> 168  
 <212> DNA  
 <213> Human  
  
 20  
 <220>  
 <221> misc\_feature  
 <222> (6)..(6)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (15)..(15)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (37)..(38)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (47)..(47)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (56)..(57)  
 <223> n is a, c, g, or t  
 45  
 <220>

<221> misc\_feature  
 <222> (94)..(94)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (127)..(127)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (155)..(155)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (157)..(157)  
 <223> n is a, c, g, or t

20 <400> 14  
 ggcccntggg ggggnagggc ctttcgggg ccgggggnngg gccccnttt ggcccnnggg 60  
 gggtttcccg gggaacccaa ccctttaagg ggtngggggg aatttcccc caaaaaaagg 120  
 25 gaaaaanttt tccggggggc ccaccggga agggntnccg gggaaggg 168

<210> 15  
 <211> 438  
 30 <212> DNA  
 <213> Human

<400> 15  
 aaaaaacttc ttatagtc ttatatatt ttaattgtt atgttagggg aagctataga 60  
 35 ggaacaaatt tgggataaa atataaggct gggattacag gcatgagcca ccaagcccgg 120  
 cccacatttc cattttaat atatactgtg ctttacaat attataatat gttttaaaat 180  
 40 atgttcacag aagcacctgg tctgtgaatg gcatgccagc attaaaaaa ataagcattc 240  
 ttgaaatata tatttagttt ttaattgtg taggaaaatc aaagccagag ggagtagaaa 300  
 caaaatttgt gattttctaa atactcttg gctgcaggga agaaaccacg tcccaggcga 360  
 45 agtctacct aattgatga taaaattaca tggaagggat tctgttggc atgaggacct 420

accaagatgg tcaacaga

438

5 <210> 16  
<211> 235  
<212> DNA  
<213> Human

10 <220>  
<221> misc\_feature  
<222> (5)..(5)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (15)..(15)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (39)..(39)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (47)..(47)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (52)..(52)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (69)..(69)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (154)..(154)  
<223> n is a, c, g, or t

45 <220>

<221> misc\_feature  
<222> (207)..(207)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (217)..(217)  
<223> n is a, c, g, or t

10 <400> 16  
aaggnctttt ccggnccggc ccggccccc ttggcccang ggggttnccg gnaaaccacc 60  
  
ctttaaggnt tgggggaatt cccccaaaaa aggaaaaaat ttcccgggg gcccacccgg 120  
  
15 aaagggggaa ggcccccaa accggggggg gggnaaaaag gtgggtttcc cccttttcc 180  
  
aattcccaa accaatttc aaaaggnaaa ccaacnttc ccaaatggg aaagg 235

20 <210> 17  
<211> 294  
<212> DNA  
<213> Human

25 <220>  
<221> misc\_feature  
<222> (18)..(19)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (27)..(27)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (47)..(47)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (66)..(66)  
<223> n is a, c, g, or t

45 <220>

<221> misc\_feature  
 <222> (76)..(76)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (82)..(82)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (108)..(108)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (133)..(133)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (162)..(162)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (210)..(210)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (260)..(260)  
 <223> n is a, c, g, or t

35 <220>  
 <221> misc\_feature  
 <222> (276)..(276)  
 <223> n is a, c, g, or t

40 <400> 17  
 aaaccaaccc tttaaggntt ggggggnaat tcccccaaa aaaaggnaaa aatttttcc 60  
 ggggggnccaa accggnaaag gntttgggaa aaccaaattt ttttggnc caaccccccc 120  
 45 caaattgggg ggnaaaccaa atttaagggg ggaagggggg gnccccccg ggaaaggccc 180



aaggggggaa aatttttccg ggggtgggtn gggggaacca atttaagggg ggggcccccg 240

gggggggttc ccttgggcn ttttcttt tgggtnaaaa aaaaaaaccc cttg 294

5

<210> 18  
<211> 453  
<212> DNA  
<213> Human

10

<400> 18  
gtagaatata ggggtgatact ggagatctac tgcgacctag accatgatac ataaccacac 60

aagttaatc cctgggttct aactaccctt actgtcactt agcttaacct gcctccaatc 120

15

ctgtacttga actctaaaac tggtagagaa actcagtgt tactccaaca gattcatttc 180

aaatagctgt aaaaggtatg ttactccag aagaccagag ttgcttctt tgaacttctc 240

20

attccttggg cctaggaacc ctcatcacc tcacccaac gtcaaccag atcttctctt 300

ccataaacag cactccctca ggcccctgcc tgacacaggc atagactgtc atgttgatt 360

cacagacagg ctgtgctaga ggaaacctct ggggctcacc aggggccgtg ggatgggctt 420

25

ctggggcttc ttggagccca acttctcat ggc 453

30

<210> 19  
<211> 242  
<212> DNA  
<213> Human

35

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (40)..(40)  
<223> n is a, c, g, or t

45

<220>  
<221> misc\_feature

<222> (59)..(59)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (76)..(76)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (107)..(107)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (165)..(165)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (189)..(189)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (216)..(216)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (221)..(221)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (230)..(230)  
<223> n is a, c, g, or t

<400> 19

40 gagtcagact gtaaggnacg aaccctcggg gtccccacgn tgttcccccc ggggtaacnt 60  
  
cggcccgggc ccgggnagcc cttcccgggc ttttccccg ggggggnccc gggggggacc 120  
  
tttaggcggc accccaacaa caccaggccc tacttttcc aaggncgggg aagcccatgg 180  
45 gttctgggna acgggcaatg cgggcttgca acggngggaa naaaaacagn cccaaaagaa 240

tg 242

5 <210> 20  
 <211> 181  
 <212> DNA  
 <213> Human

10 <400> 20  
 gtttggttgt ttttgagatg aatctcactc tgtcgcccag gctggaatgc agtggtgtga 60  
 tctcagctca ctgcaacctc cacctctcag gagaattgct gaacctggga ggcggaggtt 120  
 15 gcaggagct gagattgcgc cactgccctc catcctgggc gacagagcaa gaacctgtct 180

c 181

20 <210> 21  
 <211> 100  
 <212> DNA  
 <213> Human

25 <220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (23)..(23)  
 <223> n is a, c, g, or t

35 <220>  
 <221> misc\_feature  
 <222> (28)..(28)  
 <223> n is a, c, g, or t

40 <220>  
 <221> misc\_feature  
 <222> (36)..(36)  
 <223> n is a, c, g, or t

45 <220>

<221> misc\_feature  
 <222> (41)..(41)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (44)..(44)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (53)..(53)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (59)..(59)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (62)..(62)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (67)..(67)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (70)..(71)  
 <223> n is a, c, g, or t

35 <220>  
 <221> misc\_feature  
 <222> (74)..(74)  
 <223> n is a, c, g, or t

40 <220>  
 <221> misc\_feature  
 <222> (76)..(76)  
 <223> n is a, c, g, or t

45 <220>  
 <221> misc\_feature

<222> (79)..(79)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (83)..(84)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (86)..(86)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (97)..(97)  
<223> n is a, c, g, or t

<400> 21

20 gcacaaggaa gggtggnacg atnttcngc actggnaaaa ngcngctatg gtngtgaant 60

tncccnccn ntnanacna aanntngcac tcttggtgc 100

25 <210> 22  
<211> 100  
<212> DNA  
<213> Human

30

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> n is a, c, g, or t

35

<220>  
<221> misc\_feature  
<222> (17)..(17)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (37)..(37)  
<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
 <222> (52)..(53)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (56)..(56)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (77)..(77)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (85)..(85)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (89)..(89)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (96)..(96)  
 <223> n is a, c, g, or t

30 <400> 22  
 cntgcgcat ttactgnagg tggacaagga tactatnaac aaagatgtgg cnnaangaga 60  
 ataatggaag atagctntga ggatnaacnc tggtnaggg 100

35 <210> 23  
 <211> 100  
 <212> DNA  
 <213> Human

40  
 <220>  
 <221> misc\_feature  
 <222> (17)..(17)  
 45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (19)..(19)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (27)..(29)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (37)..(38)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (46)..(46)  
 <223> n is a, c, g, or t  
 20  
 <220>  
 <221> misc\_feature  
 <222> (49)..(49)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (65)..(65)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (72)..(72)  
 <223> n is a, c, g, or t  
 35  
 <400> 23  
 acaccttccc acttgcnnga aaggggnnng gcccccnct tgggcnganc attaagcctt 60  
 tttgnggctg cngcccctgt gcctggtgcc acaacaaatg 100  
 40  
 <210> 24  
 <211> 227  
 <212> DNA  
 45 <213> Human

<220>  
<221> misc\_feature  
<222> (5)..(5)  
5 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (13)..(13)  
10 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (71)..(71)  
15 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (88)..(88)  
20 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (91)..(91)  
25 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (109)..(109)  
30 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (157)..(157)  
35 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (177)..(177)  
40 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (199)..(199)  
45 <223> n is a, c, g, or t



<220>

<221> misc\_feature

<222> (207)..(207)

<223> n is a, c, g, or t

5

<220>

<221> misc\_feature

<222> (211)..(211)

<223> n is a, c, g, or t

10

<400> 24

ccggncacca cnttaaggt tgggggattt ccccaaaaaa ggaaaatttt cggcggccaa 60

cggaaggcc nttggggaaa aaaccaangg ncaaaccccc ccaaccacnc ggcccccccc 120

15

aaggggggtg gggaagagcc aaatttcttt gggaaanaac gcccccttgg ggaaaanaag 180

gccaaccacc tttaacanc cccaangcg nggaagccat ttcttgg 227

20

<210> 25

<211> 306

<212> DNA

<213> Human

25

<400> 25

tccaaaagta gagcagaggg atattttgtt ctactgagcc acgaaaaaca cctgaattgt 60

ttcgaccatg tgccttccca ggttgatgaa gacattgcta cacagtctgc agatcaggaa 120

30

ggaagaattg tatgtgggag ttttaatgg tctcatttca ttggctataa ctgagtaca 180

aggagaaata taactgcaga ggagctttga aaatttagtt cagctgaggg taaaggaaga 240

35

agagacaaat ttgtcatca gctagtgatc tgccatacaa ggtgttcct taatatgtgt 300

agaatg 306

40

<210> 26

<211> 492

<212> DNA

<213> Human

45

<220>

<221> misc\_feature  
<222> (299)..(299)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (333)..(333)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (353)..(353)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (410)..(411)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (460)..(460)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (474)..(474)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (479)..(479)  
<223> n is a, c, g, or t

35 <400> 26  
cggcttcggg ccaagcgttt ccagagtttg ccgaactgct gagcaagttc gctattctcc 60  
  
agatcgcta gccctttgcg ggcgaccacc acgatgtccc agcctgtcag gttgtcctga 120  
  
40 ttgaggcgaa aggactcgcg gatttgacgc ttgatgcggt tgcgctcgac ggcgagcttg 180  
  
acgctctttt tgccgatcac caaacctagg cggggatgat caagctgggt atcgcgcgct 240  
  
agcagcagga cacttttgcc cgggagcttt accgcttggg gagtcgaaga ctgccttgna 300  
45 ttgccgggga gtcagcagtc gctttttccc ggncgaagcc tcgaactcac cancctgtct 360

ggattaatta gacagcaaga cgcttgcggc ccctttggcg cgaacgaacn ncgaaaagga 420  
 ctg'gcgcggc ccgtttcttt ggggggccaa taccggggcn cggggaaaac ccgnggggng 480  
 5 gccaaacccc cc 492  
  
 <210> 27  
 10 <211> 500  
 <212> DNA  
 <213> Human  
  
 15 <220>  
 <221> misc\_feature  
 <222> (348)..(348)  
 <223> n is a, c, g, or t  
  
 20 <220>  
 <221> misc\_feature  
 <222> (422)..(422)  
 <223> n is a, c, g, or t  
  
 25 <220>  
 <221> misc\_feature  
 <222> (435)..(435)  
 <223> n is a, c, g, or t  
  
 30 <220>  
 <221> misc\_feature  
 <222> (476)..(476)  
 <223> n is a, c, g, or t  
  
 35 <220>  
 <221> misc\_feature  
 <222> (490)..(490)  
 <223> n is a, c, g, or t  
  
 40 <400> 27  
 cgaagcgatg gaagcgcaag ctggtaggg gagcattccc acggcagaga aggtcgggcg 60  
 acgagccggg ctggagcggg gggaaaagca aatgtaggca taagtaacga caatgcgggc 120  
 45 gagaaccccg cacaccgaaa ggctaaggat tcctccgcta tgtcaatcaa cggagggtta 180

gtcgggtact aaggcgtag cgaaggcgaa gcgccgatgt gaagggggtt aatattcctc 240  
 cacttgccat gcgtgtgaat ccatgacgga gacgaagccg ggggtgcgtc ctgacggaag 300  
 5 tgggcgccag caggggcggc ctccgggcca aaccgaacct caggtcanac ttccaagaaa 360  
 agtgggtgaa acgccagcgc atggcaaccc gtaccgcaaa ccgacacagg tagccggggg 420  
 anaacatcct aagngctcg agagtacttt ctagagcggc cgcggggcccc atcgantttt 480  
 10 ccaccgggn ggggtaccag 500

<210> 28  
 15 <211> 231  
 <212> DNA  
 <213> Human  
 20 <220>  
 <221> misc\_feature  
 <222> (18)..(18)  
 <223> n is a, c, g, or t  
 25 <220>  
 <221> misc\_feature  
 <222> (47)..(47)  
 <223> n is a, c, g, or t  
 30 <220>  
 <221> misc\_feature  
 <222> (59)..(59)  
 <223> n is a, c, g, or t  
 35 <220>  
 <221> misc\_feature  
 <222> (74)..(74)  
 <223> n is a, c, g, or t  
 40 <220>  
 <221> misc\_feature  
 <222> (138)..(138)  
 <223> n is a, c, g, or t  
 45 <220>  
 <221> misc\_feature

<222> (174)..(174)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (176)..(176)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (211)..(211)  
<223> n is a, c, g, or t

<400> 28

15 aagaaattcc gggcacgnag gcacgccctt ggtaattccc caggcgnact tctggggang 60  
gctggaaggc ttgnagggca gaaaagggat ccgcctttgg gaggaacca ggtaagggtt 120  
aagaaggaac ccacctngg ggccaaacaa aaacttaaaa acccccccat ttentncccc 180  
20 ccaaaaaaaaa aatttttaaa aaaaattttt ngccccggg ggcattgggg g 231

<210> 29

25 <211> 109  
<212> DNA  
<213> Human

<220>

30 <221> misc\_feature  
<222> (1)..(2)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (12)..(12)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (29)..(29)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature

<222> (34)..(34)

<223> n is a, c, g, or t

<400> 29

5 nncgaacaat angtctggag ctcgtgcgnc ctgnaggtgc gacactagtg gatccaaaga 60

attcggcacg agggattaca gtcgtgagcc actgcacctg gctgcaatt 109

10 <210> 30

<211> 100

<212> DNA

<213> Human

15

<220>

<221> misc\_feature

<222> (3)..(6)

<223> n is a, c, g, or t

20

<220>

<221> misc\_feature

<222> (8)..(8)

<223> n is a, c, g, or t

25

<220>

<221> misc\_feature

<222> (13)..(13)

<223> n is a, c, g, or t

30

<220>

<221> misc\_feature

<222> (15)..(15)

<223> n is a, c, g, or t

35

<220>

<221> misc\_feature

<222> (20)..(20)

<223> n is a, c, g, or t

40

<220>

<221> misc\_feature

<222> (27)..(27)

<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
 <222> (32)..(33)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (40)..(40)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (49)..(50)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (57)..(57)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (63)..(63)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (67)..(67)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (69)..(69)  
 <223> n is a, c, g, or t

35 <220>  
 <221> misc\_feature  
 <222> (76)..(76)  
 <223> n is a, c, g, or t

40 <220>  
 <221> misc\_feature  
 <222> (78)..(78)  
 <223> n is a, c, g, or t

45 <220>  
 <221> misc\_feature

<222> (87)..(87)  
 <223> n is a, c, g, or t  
  
 <220>  
 5 <221> misc\_feature  
 <222> (89)..(89)  
 <223> n is a, c, g, or t  
  
 <400> 30  
 10 tcnnntntg gtntggctn tccgagnggc anngagtgan tgcccgttnn tattgancac 60  
  
 cantcantng ttgccntntg atacccnana caaaattgaa 100  
  
 15 <210> 31  
 <211> 100  
 <212> DNA  
 <213> Human  
  
 20  
 <220>  
 <221> misc\_feature  
 <222> (12)..(12)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (26)..(26)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (46)..(46)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (49)..(49)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (55)..(55)  
 <223> n is a, c, g, or t  
 45  
 <220>



<221> misc\_feature  
 <222> (60)..(60)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (63)..(63)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (69)..(70)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (73)..(73)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (79)..(79)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (92)..(92)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (96)..(96)  
 <223> n is a, c, g, or t

35 <400> 31  
 tcgggcgggg anccctttac ctgtcnttac gatgcgcaag tagatnccng attngtccn 60

ganggtcggn aanttaggnt tccagcctgc gncacngcca 100

40 <210> 32  
 <211> 104  
 <212> DNA  
 <213> Human

45

<220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> n is a, c, g, or t

5

<220>  
<221> misc\_feature  
<222> (7)..(7)  
<223> n is a, c, g, or t

10

<220>  
<221> misc\_feature  
<222> (27)..(27)  
<223> n is a, c, g, or t

15

<220>  
<221> misc\_feature  
<222> (34)..(34)  
<223> n is a, c, g, or t

20

<220>  
<221> misc\_feature  
<222> (57)..(57)  
<223> n is a, c, g, or t

25

<220>  
<221> misc\_feature  
<222> (63)..(64)  
<223> n is a, c, g, or t

30

<220>  
<221> misc\_feature  
<222> (67)..(67)  
<223> n is a, c, g, or t

35

<220>  
<221> misc\_feature  
<222> (73)..(73)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (75)..(78)  
<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
 <222> (80)..(80)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (90)..(90)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (96)..(98)  
 <223> n is a, c, g, or t

15 <400> 32  
 cntgctntta cgatgcgcaa ggtagtnccg tgantttagt ccgtgatgtg tcgaaanatt 60

agnnttnacag ccngnnnnan tgccatttn gctctnnnga gaaa 104

20 <210> 33  
 <211> 102  
 <212> DNA  
 <213> Human

25 <220>  
 <221> misc\_feature  
 <222> (5)..(5)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (12)..(12)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (28)..(28)  
 40 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (32)..(32)  
 45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (38)..(38)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (44)..(44)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (57)..(57)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (68)..(68)  
 <223> n is a, c, g, or t  
 20  
 <220>  
 <221> misc\_feature  
 <222> (76)..(76)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (82)..(82)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (92)..(92)  
 <223> n is a, c, g, or t  
 35  
 <400> 33  
 tgggntggcc cngcttaact ttgcccncg anctcgngt tcgnacaggg gcgaagnaaa 60  
 ccgccaantt tttcnaacc cnaactgttt tnggttttag tt 102  
 40  
 <210> 34  
 <211> 100  
 <212> DNA  
 45 <213> Human

<220>  
<221> misc\_feature  
<222> (3)..(3)  
5 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (21)..(21)  
10 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (27)..(28)  
15 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (38)..(38)  
20 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (47)..(47)  
25 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (50)..(50)  
30 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (53)..(53)  
35 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (61)..(61)  
40 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (73)..(73)  
45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (78)..(78)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (83)..(83)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (85)..(85)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (97)..(97)  
 <223> n is a, c, g, or t  
 20  
 <400> 34  
 agnaccgctt tacagcttta ngatgcnnga gagagtancg gatttgnccn tgntggtgga 60  
 naaattaggg ttncagcntg tgnantgcca ttttcgntaa 100  
 25  
 <210> 35  
 <211> 100  
 <212> DNA  
 30 <213> Human  
 <220>  
 <221> misc\_feature  
 35 <222> (21)..(22)  
 <223> n is a, c, g, or t  
 <220>  
 <221> misc\_feature  
 40 <222> (28)..(28)  
 <223> n is a, c, g, or t  
 <220>  
 <221> misc\_feature  
 45 <222> (32)..(32)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (65)..(65)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (67)..(68)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (70)..(70)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (77)..(77)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (83)..(83)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (92)..(92)  
 30 <223> n is a, c, g, or t

<400> 35  
 cacgatatga tcagacggcg nncttgngc cntttgccc gctggtcaca ggacaacgca 60  
 35 tttnccnntn tgggtgncgg cnttcacgca tnggcgcgag 100

<210> 36  
 <211> 153  
 40 <212> DNA  
 <213> Human

<220>  
 45 <221> misc\_feature  
 <222> (4)..(4)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (8)..(8)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (29)..(29)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (43)..(44)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (46)..(46)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (57)..(57)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (59)..(59)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (84)..(84)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (98)..(98)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (115)..(115)

<223> n is a, c, g, or t



<220>  
 <221> misc\_feature  
 <222> (117)..(118)  
 5 <223> n is a, c, g, or t  
  
 <400> 36  
 tggngccttt ttgcccgtg gtcacagga aacgcatttc acnntntggt gttcggntnt 60  
  
 10 cacgcacggc agcgagtga atgnccgatt cattcttnaa cgacgcacac acccngnngc 120  
  
 cctgtgaaac ccataaacag tgggaaatgg.tgc 153  
  
 15 <210> 37  
 <211> 151  
 <212> DNA  
 <213> Human  
  
 20  
 <220>  
 <221> misc\_feature  
 <222> (7)..(7)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (10)..(10)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (53)..(53)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (61)..(61)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (65)..(66)  
 <223> n is a, c, g, or t  
 45  
 <220>

<221> misc\_feature  
 <222> (72)..(72)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (74)..(75)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (89)..(89)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (94)..(94)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (100)..(100)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (107)..(107)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (126)..(126)  
 <223> n is a, c, g, or t

35 <220>  
 <221> misc\_feature  
 <222> (141)..(141)  
 <223> n is a, c, g, or t

40 <400> 37  
 gcgcgcntgn aggccccgac actagtggat ccaaagtatt ttggcacgag ctnagttcga 60  
 ngatnnagac cncnnatcac ctaatacanc catnactcan atgactnttt gtgcgccttt 120

45 tatcanatgc atagcctatc naaaacatca c 151

<210> 38  
 <211> 100  
 <212> DNA  
 5 <213> Human

<220>  
 <221> misc\_feature  
 10 <222> (2)..(2)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 15 <222> (10)..(10)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 20 <222> (61)..(61)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 25 <222> (63)..(63)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 30 <222> (72)..(72)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 35 <222> (79)..(79)  
 <223> n is a, c, g, or t

<400> 38  
 gngcgcttgn aggccgacac taggggatcc aaagaattcg gcacgagctc gtgccgaatt 60  
 40 ngncacgagt tnggctgcnt ctttatacaa cttttcttca 100

<210> 39  
 45 <211> 100  
 <212> DNA

<213> Human

<220>

5 <221> misc\_feature  
<222> (5)..(5)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (7)..(8)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (10)..(10)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (15)..(16)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (20)..(20)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (24)..(24)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (71)..(71)  
<223> n is a, c, g, or t

<400> 39

40 aaagnnntn ctggnnttan gcanntaacc caggcactgg ggcgctgaac agctactcag 60  
ctgcttaagt ngcccactg gtccagacca gcgaccacgc 100

45 <210> 40  
<211> 102

<212> DNA  
<213> Human

5 <220>  
<221> misc\_feature  
<222> (80)..(80)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (91)..(91)  
<223> n is a, c, g, or t

15 <400> 40  
ttccccagg atctttctta tatctatcag atctaggta aaggattact gtctttagg 60

tgtcctgaag gacaagccgn ttcgttgaa nctgtgaaat ac 102

20  
<210> 41  
<211> 325  
<212> DNA  
<213> Human

25  
<400> 41  
ttggcacga ggagaagaga ggagccgtca gaacatatgg gggatgtgtt caagaagcag 60

atttgtggtc ggaagcttg caaagagggg acctgggtct gaggacatg cgtggccact 120

30  
ggtgctcctg cgttggact gtgcaggcct ctctatgct gatgcgtctc ccactcctg 180

agctaattc tgctctgctc ctctgtgac atgtggcagc gtgggaaata gccactgtcc 240

35 cctgtccctg ctgttctgg tgcacccag caccaggcca ctctgggagc cagggcagat 300

ggtcctccct gtggtcctgg cctct 325

40 <210> 42  
<211> 103  
<212> DNA  
<213> Human

45  
<220>

<221> misc\_feature  
<222> (14)..(14)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (31)..(31)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (36)..(36)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (63)..(63)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (73)..(73)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (93)..(93)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (98)..(98)  
<223> n is a, c, g, or t

35 <400> 42  
gtggcccaag gggactgaa ggggccctcc ntaagnggag gggttgggga gtaaggcctg 60  
ggnaggaccc tgntgactcg gggggcggga gcngggancc agg 103

40 <210> 43  
<211> 221  
<212> DNA  
<213> Human

45 <400> 43

catattttga aatacttttc tcccaaactg gggttattag cgtgtaccct gctttccac 60

tttaaaaatt tatgcatat gtccagcttc cagtcagtgc ttctggtag catgaggata 120

5 actagatttt actgtagatg gtagataaaa gtccagtga aagcaaagat gtgtaatgtt 180

ttggtagcct cagtgcctt atccaagta aaagcaaagt t 221

10 <210> 44  
<211> 100  
<212> DNA  
<213> Human

15 <220>  
<221> misc\_feature  
<222> (2)..(2)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (11)..(11)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (27)..(28)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (34)..(34)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (38)..(39)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (41)..(41)  
<223> n is a, c, g, or t

45 <220>

<221> misc\_feature  
 <222> (49)..(50)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (61)..(62)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (67)..(68)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (76)..(76)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (79)..(80)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (85)..(85)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (89)..(89)  
 <223> n is a, c, g, or t

35 <220>  
 <221> misc\_feature  
 <222> (93)..(93)  
 <223> n is a, c, g, or t

40 <400> 44  
 anagatatca ntgatttatt gctgggnccc tgtntganng ntctaaggnn tgaagattat 60  
 nncattnngc aagcgnacnn gcgcngccna gcngaccagg 100

45 <210> 45



<211> 106  
 <212> DNA  
 <213> Human

5  
 <220>  
 <221> misc\_feature  
 <222> (8)..(8)  
 <223> n is a, c, g, or t

10  
 <220>  
 <221> misc\_feature  
 <222> (24)..(24)  
 <223> n is a, c, g, or t

15  
 <220>  
 <221> misc\_feature  
 <222> (33)..(34)  
 <223> n is a, c, g, or t

20  
 <220>  
 <221> misc\_feature  
 <222> (47)..(48)  
 <223> n is a, c, g, or t

25  
 <220>  
 <221> misc\_feature  
 <222> (58)..(58)  
 <223> n is a, c, g, or t

30  
 <220>  
 <221> misc\_feature  
 <222> (63)..(63)  
 <223> n is a, c, g, or t

35  
 <220>  
 <221> misc\_feature  
 <222> (68)..(68)  
 <223> n is a, c, g, or t

40  
 <220>  
 <221> misc\_feature  
 <222> (71)..(71)  
 <223> n is a, c, g, or t

45  
 <220>

<221> misc\_feature  
 <222> (73)..(73)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (77)..(77)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (88)..(88)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (95)..(96)  
 <223> n is a, c, g, or t

20 <400> 45  
 atatttcngg agcttgacgc ggcnacacta ggnnactaaa agaattnnag aaagaggnc 60  
  
 atnggacnag nanacangaa acctgcanac ttggnggctt ggaagt 106

25  
 <210> 46  
 <211> 100  
 <212> DNA  
 <213> Human

30  
 <220>  
 <221> misc\_feature  
 <222> (74)..(74)  
 35 <223> n is a, c, g, or t

<400> 46  
 gatgtggaga tgcttgatag gttactgggc ggcaatccag gaggatga agcgcatatg 60

40 cgaacatttc acngcatat tgcggtgcaa gggcttactg 100

<210> 47  
 <211> 101  
 45 <212> DNA  
 <213> Human

<220>

<221> misc\_feature

5 <222> (7)..(8)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (17)..(17)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (23)..(23)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (33)..(33)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (42)..(42)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (47)..(48)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (52)..(52)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (55)..(55)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (60)..(60)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (62)..(62)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (66)..(66)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (70)..(71)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (74)..(74)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (84)..(84)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (86)..(87)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (96)..(96)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (99)..(100)  
 40 <223> n is a, c, g, or t

<400> 47  
 ccccccncc cttctntcc ccnaaagaat aanataagaa tngctannga gnaancgacn 60

45 anggtnttan nagntatatg tatntnncaa accaantann a 101

<210> 48  
 <211> 100  
 <212> DNA  
 5 <213> Human  
  
 <220>  
 <221> misc\_feature  
 10 <222> (5)..(6)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 15 <222> (33)..(33)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 20 <222> (35)..(36)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 25 <222> (42)..(42)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 30 <222> (46)..(46)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 35 <222> (48)..(48)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 40 <222> (55)..(55)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 45 <222> (59)..(59)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (69)..(69)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (81)..(81)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (87)..(87)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (91)..(91)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (94)..(94)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (97)..(97)  
 30 <223> n is a, c, g, or t

<400> 48  
 aaggnnaggc tcgttggggg aaaaaacccg cntnnccggg cccccngnaa acccncacna 60  
 35 ggggaccna aaaaccggaa naaaccnccc nagnaancca 100

<210> 49  
 <211> 473  
 40 <212> DNA  
 <213> Human

<220>  
 45 <221> misc\_feature  
 <222> (20)..(20)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (38)..(38)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (164)..(164)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (178)..(178)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (201)..(201)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (211)..(211)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (274)..(274)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (305)..(305)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (340)..(340)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (346)..(346)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (386)..(387)  
 5 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (405)..(405)  
 10 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (433)..(433)  
 15 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (446)..(446)  
 20 <223> n is a, c, g, or t  
  
 <400> 49  
 atgagtatga aatgaaaggn tgagatgaaa tgatgatntg agatgagatg aaatgagatg 60  
 25 aaaccgagat gaaatgatga aatgatgaga tgagaccgag acgaaatgat gagatgaaat 120  
 gagatgagat aaaatgagat gaaatgaagt gaaatgaaat gaantcctga aattgacntg 180  
 agatgaactg agataaaatg ntgagatgaa ntgatgagaa gaaatgagat gaaatgagat 240  
 30 gagatgatga gatgaaaaat gctgagatga aacntgatga gatgaaatga tgagatgaat 300  
 tgaantgaaa tgaaataatg aaataatgac ctgagatgan atgaantgat gaactgatga 360  
 35 actaatgaaa tgaaaatgaa atgganntga tgagatgaga agaantgctg agatgagata 420  
 aaatgagatg aantgatgag atgaantgaa atgctgagat gagatgagat gaa 473  
  
 40 <210> 50  
 <211> 453  
 <212> DNA  
 <213> Human  
 45 <220>



<221> misc\_feature  
<222> (5)..(6)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (13)..(13)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (18)..(18)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (22)..(22)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (39)..(39)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (45)..(45)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (48)..(48)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (54)..(54)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (65)..(65)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (70)..(70)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (72)..(72)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (80)..(80)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (83)..(83)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (90)..(90)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (94)..(94)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (96)..(96)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (98)..(98)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (102)..(102)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
<222> (104)..(104)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (113)..(113)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (115)..(115)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (117)..(117)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (121)..(121)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (123)..(123)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (125)..(125)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (128)..(128)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (142)..(142)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (144)..(144)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (160)..(160)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (174)..(175)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (180)..(181)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (186)..(186)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (192)..(192)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (198)..(198)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (205)..(205)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (215)..(215)  
 40 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (223)..(224)  
 45 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (233)..(234)  
<223> n is a, c, g, or t

5

<220>  
<221> misc\_feature  
<222> (238)..(238)  
<223> n is a, c, g, or t

10

<220>  
<221> misc\_feature  
<222> (243)..(243)  
<223> n is a, c, g, or t

15

<220>  
<221> misc\_feature  
<222> (253)..(253)  
<223> n is a, c, g, or t

20

<220>  
<221> misc\_feature  
<222> (257)..(257)  
<223> n is a, c, g, or t

25

<220>  
<221> misc\_feature  
<222> (268)..(268)  
<223> n is a, c, g, or t

30

<220>  
<221> misc\_feature  
<222> (280)..(280)  
<223> n is a, c, g, or t

35

<220>  
<221> misc\_feature  
<222> (291)..(291)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (296)..(296)  
<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
<222> (300)..(300)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (305)..(305)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (308)..(308)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (311)..(311)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (319)..(319)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (322)..(322)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (326)..(326)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (328)..(328)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (334)..(335)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (338)..(339)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (347)..(347)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (352)..(352)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (358)..(358)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (361)..(361)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (367)..(367)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (382)..(382)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (389)..(389)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (395)..(395)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
<222> (410)..(410)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (413)..(414)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (418)..(418)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (425)..(425)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (436)..(436)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (443)..(443)

<223> n is a, c, g, or t

<400> 50

ttccnnagct gtnacganac antcttgaat tgaaattgna cacancnngt gtnagccct 60

30 gatanggccn gnaagcaatn tanaggatan ccgnangnta tngnaacaca ttnncnagc 120

ntntncanca gctgatgcag gncncctatg atgcgattan ggactacgac tatnnctcan 180

35 ngctctnaaca gncgcgangg ctgantacta aaagnacaca aanntgtgca ccnncatnac 240

tcnccgttgac tgnacantgt agacctgnaa tacctggctn aaaggggtct nactgncatn 300

40 agagntgnag ntgccctnc antagnnga gctnnaanng gcctgtnttt gntttacntc 360

ntcgganagg cgatgccatt anagaccna gaacncattg gtgatatacn ctnnaccngg 420

agggnntaca ttgggnaatg atnattatgg ggg 453

45 <210> 51



<211> 542  
<212> DNA  
<213> Human

5

<220>  
<221> misc\_feature  
<222> (19)..(19)  
<223> n is a, c, g, or t

10

<220>  
<221> misc\_feature  
<222> (59)..(59)  
<223> n is a, c, g, or t

15

<220>  
<221> misc\_feature  
<222> (87)..(87)  
<223> n is a, c, g, or t

20

<220>  
<221> misc\_feature  
<222> (119)..(119)  
<223> n is a, c, g, or t

25

<220>  
<221> misc\_feature  
<222> (203)..(203)  
<223> n is a, c, g, or t

30

<220>  
<221> misc\_feature  
<222> (215)..(215)  
<223> n is a, c, g, or t

35

<220>  
<221> misc\_feature  
<222> (274)..(274)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (296)..(296)  
<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
<222> (309)..(309)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (353)..(353)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (425)..(427)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (431)..(431)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (451)..(451)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (470)..(470)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (472)..(472)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (478)..(478)  
<223> n is a, c, g, or t

40 <400> 51  
caactgtgag caaggaatnc cattaaatgc cattgtatat tcattgatca gtgaaatcnc 60

atctgggtca cagtggtcatc tatgttnaca gtataaatcc ctgtggctat gaatgaaang 120

45 cttgtttaga cttgcatctg cacatagaag tagggatttc atgctgttat cagcctaatt 180

ttagcctata gaatttcaag ttngctagag gttngctct ccatggtata agtttagcaa 240

gaaaagtcatt ttgtctgtg ctctagcagg ttanaatgtg gaagtatagt gtgcanagtt 300

5 ttaatccgna tatgttatta aaacatatac atcattttat atcatacatc tagnaataaat 360

attcaaaaatt aaatagtgat ttgggattga ttacatctta ttactagctg taataaatga 420

cctcnngat ngtttaaaat tgtttcctc ncatataata aaaatacctn angcatanat 480

10 cgattgtcca aaaattgaat atatatacac acctctcca ttagaactaa atatgtggaa 540

tg 542

15

<210> 52  
<211> 733  
<212> DNA  
<213> Human

20

<220>  
<221> misc\_feature  
<222> (13)..(14)  
25 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (17)..(17)  
30 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (20)..(20)  
35 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (22)..(22)  
40 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (27)..(27)  
45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (29)..(29)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (31)..(31)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (36)..(36)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (43)..(43)  
 <223> n is a, c, g, or t  
 20  
 <220>  
 <221> misc\_feature  
 <222> (46)..(46)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (58)..(59)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (74)..(74)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (78)..(78)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (81)..(81)  
 <223> n is a, c, g, or t  
 45  
 <220>

<221> misc\_feature  
<222> (85)..(85)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (87)..(88)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (90)..(92)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (95)..(96)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (105)..(105)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (107)..(107)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (109)..(109)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (115)..(117)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (120)..(120)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (123)..(123)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (148)..(148)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (154)..(156)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (167)..(167)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (169)..(172)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (179)..(179)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (183)..(183)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (185)..(187)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (194)..(194)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
<222> (200)..(203)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (205)..(205)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (235)..(236)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (242)..(242)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (244)..(244)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (246)..(247)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (250)..(250)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (303)..(303)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (305)..(305)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (318)..(318)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (327)..(327)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (331)..(331)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (335)..(336)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (347)..(347)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (349)..(349)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (353)..(353)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (362)..(362)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (365)..(365)  
 40 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (388)..(388)  
 45 <223> n is a, c, g, or t



<220>  
 <221> misc\_feature  
 <222> (395)..(395)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (405)..(405)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (407)..(407)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (412)..(412)  
 <223> n is a, c, g, or t  
 20  
 <220>  
 <221> misc\_feature  
 <222> (416)..(416)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (429)..(429)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (435)..(435)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (444)..(444)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (475)..(475)  
 <223> n is a, c, g, or t  
 45  
 <220>

<221> misc\_feature  
<222> (481)..(481)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (485)..(485)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (488)..(488)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (505)..(507)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (525)..(525)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (528)..(528)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (532)..(532)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (534)..(535)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (543)..(543)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (551)..(553)  
 <223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
 <222> (555)..(555)  
 <223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
 <222> (561)..(561)  
 <223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
 <222> (568)..(568)  
 <223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
 <222> (573)..(573)  
 <223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
 <222> (584)..(584)  
 <223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
 <222> (589)..(589)  
 <223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
 <222> (598)..(598)  
 <223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
 <222> (605)..(605)  
 <223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
 <222> (612)..(612)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (618)..(618)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (633)..(633)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (647)..(647)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (653)..(654)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (664)..(664)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (679)..(679)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (689)..(689)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (695)..(695)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (698)..(698)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (711)..(711)

5 <223> n is a, c, g, or t

<220>

<221> misc\_feature

<222> (720)..(720)

10 <223> n is a, c, g, or t

<400> 52

atatgacctg cgnncanacn cnctaanang ngactngtta aanacnttcc gtggaatnna 60

15 ctcagactgc aaantgtnat nctgncnnan nntgngact gtcngncng attnnngcn 120

tgnaatacta ttgcctctta tatacacnac caannntgcg aagggcnann nnaccttnc 180

cantnnnctg gggncaccn nnnngaaact gagagtggat ctgtgtacc tgacnnacca 240

20 gntntnnagn agggcgctca ctctgattgg tgcacatgg ttacacagtg tgtgcaaaga 300

ccngnctatc tactganga tgattgncag ngccnntggg tggcacnang ggnactgatg 360

25 ancancactg accctgccga cgccagangc cgcanatccg gagantncat gngacnata 420

aggttaccnc cttnaccgg gcancaatct gcttctatgg tgaatgcaga ccatntagaa 480

ntctntcnet ataggcatga ttttnnncag tgcgtcagcc ttganaanga ancnnacttt 540

30 tgnatagatga nnnngtctc ncccttnggg ctnacaaatt ccancacctt tgggtggcngc 600

agccnttaag ancactnttt ttgggttgcg cntttgatg aattacnaat agnntgtttt 660

35 gttncaaggc ccttctgcna aatatgaana aaagngcnct tagctttttg ngggaactgn 720

actggaaatt ttg 733

40 <210> 53

<211> 100

<212> DNA

<213> Human

45 <220>

<221> misc\_feature  
<222> (13)..(13)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (15)..(15)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (37)..(37)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (42)..(42)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (44)..(45)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (50)..(50)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (57)..(59)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (70)..(70)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (74)..(74)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (80)..(80)

<223> n is a, c, g, or t

<400> 53

5 gatcagacaa gancntgggtc cacagcggga cgagagntct cnanntgcn ggggagnnnc 60

caagtacgcn agcnctgaan ctaaagcaag caagaaaaag 100

10 <210> 54

<211> 515

<212> DNA

<213> Human

15 <400> 54

atatggcaag gataaccct atacttctgc ataatgaatt aactaaaata acttgcaagg 60

agagccaagc taaacccccg ataccgacga gtaccagaac aggtaagcac cccgtctatg 120

20 tagatatggg aagattatag gaggcgacaa ctaccgagcc tggatagc tgggtccaa 180

gaagagtctt agttcattta ttggcccag aaccctctaa tcccctgta atttatgtca 240

agaggaacag ctctttggac actggaaaac cgtgagagag taagattac acccttaggg 300

25 gcctaatagc agccaccatt aagaaagcgt tcgtccaca cccactacct aaaaatcgaa 360

tataactgac tcctcacacc caattggcca atcattcccc tataaaagaa ctatgttagt 420

30 ataagtaacc tgaaaacatt ctctctgca taagccctgc gtggattat atcctgcact 480

gacaattaac tgccccaata tctacaatcc aacct 515

35 <210> 55

<211> 176

<212> DNA

<213> Human

40

<220>

<221> misc\_feature

<222> (5)..(5)

<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
 <222> (32)..(32)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (40)..(40)  
 <223> n is a, c, g, or t

10 <220>  
 <221> misc\_feature  
 <222> (60)..(60)  
 <223> n is a, c, g, or t

15 <220>  
 <221> misc\_feature  
 <222> (62)..(62)  
 <223> n is a, c, g, or t

20 <220>  
 <221> misc\_feature  
 <222> (76)..(76)  
 <223> n is a, c, g, or t

25 <220>  
 <221> misc\_feature  
 <222> (107)..(107)  
 <223> n is a, c, g, or t

30 <220>  
 <221> misc\_feature  
 <222> (155)..(155)  
 <223> n is a, c, g, or t

35 <400> 55  
 tgtnaggat caaattataa tattgaaata anaacagctn acatttatat agcatgttn 60

cntatctcaa ctaatnataa atgggaaaat gggcaactgg gcaggcngaa cccagaggga 120

40 agcctgcct cattagacca agacagcaag gttncctg gtcactagat gaaatt 176

<210> 56  
 <211> 317  
 45 <212> DNA  
 <213> Human



<220>  
 <221> misc\_feature  
 5 <222> (4)..(4)  
 <223> n is a, c, g, or t

<400> 56  
 cagnagtgat gttgcaatat ctggaactag caaaggatac tgatgagaaa acgtggaatc 60  
 10 atgtgggatg tgacctccta ggactcacct tgcacagctg ggtgcagcag ggataggtaa 120  
 ggatttgggg ttagaggta caattgcctt ttatggta gagaaaggtc ctggggctgg 180  
 15 agggagcctg acgatctgct ctgtgtgcaa ggggagagtt aactctgcac gcaagagcct 240  
 gcttaaaggg ctgtgtcagt tctattgtaa acaccaactt aaagtgggtg atgctggcag 300  
 acattgttat tgccatt 317  
 20

<210> 57  
 <211> 209  
 <212> DNA  
 25 <213> Human

<400> 57  
 ctcatacacc tgtggctact gtttctaca gagtgcctaaa actattcgag agaattaggct 60  
 30 ctggactgga cactgtatac ccacatgcaa gatgaagttg gccccttaca tcctatacgc 120  
 aggagaattg cgtcatttaa agcctgttga cgctttctc ccgcagacga atggaaagat 180  
 taattgggag tgggggctga aacaattcg 209  
 35

<210> 58  
 <211> 262  
 <212> DNA  
 40 <213> Human

<400> 58  
 aattttgctg ttacatggtg gctcaactga gtccatact ttgaaggccg ggagttaatc 60  
 45 acctggtcac cgagttgcga accagcctcc aatatgtgga accctgtact ctctaaaaat 120

caaatcaccg gcatggagat tgcgcctgtg gtcccaaat actcgggctg ggacacgatg 180

agttgcttgg cccaaggaag gaggggtgta tggtgatca cactggtccg cctgggtgac 240

5 agagcgagac tccatctcta at 262

<210> 59

<211> 430

10 <212> DNA

<213> Human

<400> 59

gtcagtttat ttctgactag ggatatttc ttccattta gaaaagaaga aaaaaaaaaa 60

15 aaacctttat tgtcttacag gggggaacta gcgcggggct gaataaaacc ttggccctt 120

cccgggggag gggatatccg ttataaacc ccaagggtat ttcttagca aaatacttaa 180

20 aaccggccgg ggttttata caaactggga acccactttt gaaaaattt ggcctttga 240

tctgggatgg gaatatgagt ttatatcat ttctttct tttgggcaa aggcccggtt 300

aagtattccc ccccgggggg cctttacaaa aagggcggtt taaaagctt ttgggcccc 360

25 ctagggaatt gtttaacac ctaaaaccc ctgcttcct taaagggcg ttcttaatt 420

tggggcggc 430

30

<210> 60

<211> 350

<212> DNA

<213> Human

35

<400> 60

aaacctctet aactatatat cacaataacc tgcgcataag atttacgctc cgatctttc 60

atcctactag cttggaggat ttgaaccgat tatgaatacg caatactccc ggtcctcatg 120

40 tatcatgtgt aagcccatct cctgggaggg ctaacatact accatctcca aggagaggca 180

tgattccgaa tcaccacag acagctcgat caccatacgt atcacccaac atatatact 240

45 tctaagactt gctagaaca accaccacat ttgatgctta atcaccactc tgacgcgat 300

taaagtgagg ggactctcct aattctgtga agttgatttt tgcattctga 350

<210> 61

5 <211> 515

<212> DNA

<213> Human

<400> 61

10 cacataaatt ctccataagt taattagtga tttaacatg atctcaatat aaacatagca 60

cactttcttt gagaattcaa catattgcaa gttaaaattt tcatagacta cacaagaaag 120

aataatcagg caaatcctta agaataaggg caattaagga tgactagccc tacaagattt 180

15 taaaaaggat tcattagtgt aaaaaatgtg atgtagatac atgaataaaa taaaatcttg 240

aagtagatcc aaatatacat ggtcagattg aatacaataa agatggcatc gtagcagtgg 300

20 agaaaagaag aattatttca taaacctgtg tggaatggct aggcaatcat ctggaaaaaa 360

atgaagtga ataataaaaa tatattctac actagcacia attataaata aagcagtgat 420

ttaaatgaga aaaattaaat cataatgatt tcaaagataa cataggataa tttctttata 480

25 gtcttctaaa atatatgact ttatgaattc tgact 515

<210> 62

30 <211> 611

<212> DNA

<213> Human

<400> 62

35 caagtacttt accaactaag ccaatcttgt cccagccag gcatttctat acaaagggcc 60

aagactttgg tttataaat aaggaggtat atataaatta tatatatttc tgagctgagt 120

aataatccac cagatacaag ttgcatcaa ctctgtgaa atatttttt tcctttttgt 180

40 tgggcatttt tatggcttaa atatagaatg accaatgcct ctagaacaaa ctgacctgg 240

tcagtgttat caagaagcag actgtttctt actttctttg tatttcctta cttatttaaa 300

45 tttgttaaaa ttgatattat gatataaaa acttcttttg ccagtgttgg tggcacacgc 360

ctttaatccc agcacttagg aggcagaggc aggggtggatt tctgaatttg agggcaggct 420

agtctacaga gcaagttcca ggtcagccaa ggctatatat agaaactctg gcatgaaaaa 480

5 ccaaccaaac caaaccaaac caaaccagac cagaccagac cagaccagac caaaccaaac 540

caaaccagac taaaccaaac caaaccagac cagaccagac cagaccagac cagaccagac 600

cagaccaaac t 611

10

<210> 63

<211> 291

<212> DNA

15 <213> Human

<400> 63

cgcagagatt ggccactgct taaactcatg cagctcctac tgttctcaa ttaatgcctt 60

20 taatgcgaat atacttctc ttcttttgc atggtcttgc ccagcctctg caatactgat 120

gaacacatgc tgaagatcat ctaactcaat atggcgcata ttctatgtc ttgctgccca 180

ggacatagga caacttcgtc gctcactagt tctaacatat taatgctggc gtaggtggag 240

25 aactactgca catatactct tactcggagg ctgaggcacg aggatcactt g 291

<210> 64

30 <211> 309

<212> DNA

<213> Human

<400> 64

35 gccagatgcc gtgttctc gatgaactct ttacatcatt ggctattcag tggagtgtt 60

cattatcacc tctactctc gcgtgttacc taactctccc tcgcagggga aatcactcca 120

tatattcaa atgtcttgc aacagtgggt actttgctct atccttagct atacgtctcg 180

40 aggcacattg ttctctatg ccccgctacg ctttgccta gagctcggcg gtatctatat 240

cttaactgcc ctcttgatcc ttacgtgccg gagaagggtg aggcagaaat ttgtcaaat 300

45 ctgattaga 309

<210> 65  
 <211> 278  
 <212> DNA  
 5 <213> Human  
  
 <400> 65  
 tagaatggaa tggagtcgaa tgtgatggaa tggacgcgaa tggaatggaa tggactcgaa 60  
 10 tggaataaag tggaatagac tcgaatggaa tggaatgcaa tggaatggac tcgaatggaa 120  
 agggatggaa tggactcgaa gggaatggaa tggaatggat tcgaatggaa aggaatggaa 180  
 tggactcaaa aggaatggaa tggaatggac tcaaatggaa tggactcgaa ttgaatgaaa 240  
 15 tgtaatggaa tagactcgaa tggaatggaa cgaaattt 278  
  
 <210> 66  
 20 <211> 142  
 <212> DNA  
 <213> Human  
  
 <400> 66  
 25 agttctcctt aggttaatta atggaatgca atcccaatga aaatgtcacc aaagttgttt 60  
 ttttttaac tgtaggaggt ttataataat gctcatatgg aaaaataaaa catgtaaaaa 120  
 atagctagta aactccccct gt 142  
 30  
  
 <210> 67  
 <211> 286  
 <212> DNA  
 35 <213> Human  
  
 <400> 67  
 atatctgcc aacctatcgg ccaatcgtgt tattttgatg acgaatgctt cggagattgg 60  
 40 aaagatgatc tctcatgct tccatgcact gcgagtagaa gacatactga gcatagtgtg 120  
 attattttcc caacaaattg gcatcatag atagaataag ctgactaaga ctacttagcc 180  
 ccacattttt ttctacttgc tccaatagca ctaacaaata ggaagctctt gcttgctccc 240  
 45 caaagctcca tticcttgaa agcagaagtg taatattact tcttag 286

<210> 68  
 <211> 179  
 5 <212> DNA  
 <213> Human  
  
 <400> 68  
 atctactttt tattcttttg ataaatgttt atgaaatata aaatactgaa aattagaaag 60  
 10 tagaagtcatt tattttatta taaaacatgt ggattagata ttttcattta tgtgattaaa 120  
 ctttctaaac aaagattata tgaattatct taaagattta aaaagtaatt aagttaaatt 179  
 15  
 <210> 69  
 <211> 390  
 <212> DNA  
 <213> Human  
 20  
 <220>  
 <221> misc\_feature  
 <222> (356)..(356)  
 25 <223> n is a, c, g, or t  
  
 <400> 69  
 cagataagac tattaagaca gataagagcc aaatcatgta gagcctcaga ggttttgat 60  
 30 cttcagtcta agaacgtaaa tccatggaag aattttaagc aggggtgtgc cttgaccaca 120  
 ttttgaattc taaactgtct ctgggtgggt gtgggtgcc ccaagagcat gtgttcattg 180  
 agggagactg gttttttaca gttgtctatg agagagatga cagttgcctg gattatgggtg 240  
 35 gtgacattgg agataagcag gtagacagat tctcagtgtt ttaggagaga aaaatcaata 300  
 ggaaatttaa aataaataat taactgtggc cataggagga aggagtcttt gggttnggtt 360  
 40 ctcaatttct gcatgagaaa aaaggtggac 390  
  
 <210> 70  
 <211> 481  
 45 <212> DNA  
 <213> Human

<220>  
 <221> misc\_feature  
 5 <222> (26)..(26)  
 <223> n is a, c, g, or t  
  
 <400> 70  
 atgatgaaat gatgagatga aatgcntgag atgagatgtg atgaaatgat gatatgaaat 60  
 10 gatgacataa aatgagatga aatgagatgt aatgatggaa tgagatgaga tgaaatgaga 120  
 tgaaatgata gatgagataa aatgatgata tgaaatgatg agatgaatga tgagatgatg 180  
 15 agatgaatga tgaaatgaaa tgatgagatg agatgatgaa atgaaatggt gagatgaaat 240  
 gatgagatga aatgaaatag tgaaatgaaa ttgaaataaa atcgaaatga gagatgaaat 300  
 gatgagatga tgaaattgat gaaatgatga gatgtgatga gatgaaatga tgagatgaga 360  
 20 tgagatgaca tgaaataatg aatgaaatt gaaatgagat aagatacgag ctgagatgca 420  
 atgagatgaa atgatgagat gaaatgaaat agtgaaatga aattgaaata aaatcgaaat 480  
 25 g 481

<210> 71  
 <211> 125  
 30 <212> DNA  
 <213> Human

<220>  
 35 <221> misc\_feature  
 <222> (5)..(5)  
 <223> n is a, c, g, or t

<220>  
 40 <221> misc\_feature  
 <222> (19)..(19)  
 <223> n is a, c, g, or t

<220>  
 45 <221> misc\_feature  
 <222> (29)..(29)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (38)..(38)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (42)..(42)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (45)..(45)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (49)..(49)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (61)..(61)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (77)..(77)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (79)..(79)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (88)..(88)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (90)..(90)

<223> n is a, c, g, or t



<220>  
 <221> misc\_feature  
 <222> (100)..(100)  
 5 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (110)..(110)  
 10 <223> n is a, c, g, or t  
  
 <400> 71  
 cggtnngaatt tgggggccnc atacgcgcng acgagtantg gncangctnc ttgactacac 60  
 15 ngacgcgccg tacaggntna attatggan cttacatggn aaaggggcan ctcaatgtcc 120  
  
 cacag 125  
  
 20 <210> 72  
 <211> 473  
 <212> DNA  
 <213> Human  
  
 25  
 <220>  
 <221> misc\_feature  
 <222> (151)..(151)  
 <223> n is a, c, g, or t  
 30  
 <400> 72  
 gaaatgaaat aatgaaatga gatgaaataa cgaataaaaa ttgaaatgag atgagaggaa 60  
 atgagatgaa atgttgaaaa gaaaggagga aatgatgagg tgagatgaaa tgatgagatg 120  
 35 aatgaatct gagatgaaat gagatgaaaa ntgatacgaa aatgatata aaaaatatga 180  
 cctgagatga aatgagatga aaaatgatac gaaaaatgat ataaaaata tgacatgaaa 240  
 40 tgaaatgaga tgatatgaaa tgacataatg aatgatgaa ttgatgatat tgaaatgaaa 300  
 ttgaaagatg agatgaaatg atgagatgaa atgaaatgtt gaaatgatga agagatgtga 360  
 catgaaatga gctgaaatga gatgaaatga aatgagatta aatgatgaga tgaaaaatga 420  
 45 tgagatgaaa aatgagatga gatgatgaga tgagatgaga tgaattgaga tga 473

<210> 73  
 <211> 500  
 5 <212> DNA  
 <213> Human

<220>  
 10 <221> misc\_feature  
 <222> (7)..(7)  
 <223> n is a, c, g, or t

<220>  
 15 <221> misc\_feature  
 <222> (16)..(16)  
 <223> n is a, c, g, or t

<220>  
 20 <221> misc\_feature  
 <222> (233)..(233)  
 <223> n is a, c, g, or t

<400> 73  
 25 aatgagnatg aaaagnatga aatgatgaga tgaaatgaaa tgatgagatg aatgaggtg 60  
 aaatgaaatt agatgaaatg taatgagatg aaatgaaatg acctaataa atgaaataat 120  
 gaaatgagat gaaataaaat aatgaaatga tgaaataatg aaatgaaaat gagatggaaa 180  
 30 tgatgagatg agaagaaatg atgagatgaa atgatgaaat gatgagatga ganaaaatga 240  
 gatgaaatga tgatgagaga tgaaatatga tgagttgaaa tgacataatg aatgaaatga 300  
 35 tgaaatggaa taatgaaatg gaaatgatga gctgagatgc aatgagttga aatgagatga 360  
 aatgatgaaa tgatgagatg aaatgatgaa atgaaataat gaaatgagat gaaataaaat 420  
 aatgaaatga tgaaataatg aaatgaaaat gaaatggaaa tgatgagatg agaagaaatg 480  
 40 atgagatgaa atgatgaaat 500

<210> 74  
 45 <211> 299  
 <212> DNA

<213> Human

<220>

5 <221> misc\_feature  
<222> (31)..(32)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (57)..(57)  
<223> n is a, c, g, or t

<400> 74

15 ggaaatcctg aagtggaaat gatgagctga nntgcaatga gttgaaatga gatgaancga 60  
tgaaatgatg agatgaaatg atgagatgag atgtgatgaa atgatgatat gaaatgatga 120  
cataaaatga gatgaaatga gatgtaatga tggaatgaga tgagatgaaa tgagatgaaa 180  
20 tgatagatga gataaaatga tgatatgaaa tgatgagatg aatgatgaga tgatgagatg 240  
aatgatgaaa tgaaatgatg agatgagatg atgaaatgaa atggtgagat gaaatgatg 299

25 <210> 75  
<211> 155  
<212> DNA  
<213> Human

30 <400> 75  
agtgaatga aattgaaata aaatcgaaat gagatgagat gaaatgatga gatgatgaaa 60  
taaaatgatg aaatgatgag gtgatgagat gaaatgatga gatgaaatga tgagatgaga 120  
35 tgagatgaca tgaaataatg aaacgaaatt gaaat 155

40 <210> 76  
<211> 367  
<212> DNA  
<213> Human

45 <220>  
<221> misc\_feature

<222> (11)..(11)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (35)..(35)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (37)..(38)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (43)..(43)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (56)..(56)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (67)..(67)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (71)..(71)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (75)..(75)  
<223> n is a, c, g, or t

<400> 76

40 atagcaaaag ngggtaaaac ccctgagttt gcganannag tantcttgta ggggcnaact 60

ctacttnaga ngaantcctc gcaaaatcct tgaatcaccg cttcagtga gtgatcac 120

cgccatgaaa ttctgctcg attagcttac gttgtttgga tagaggcaa acaaggctgt 180

45 tatcggtagc aggaatggat gttcgatttc gtagaatag cctgagagac ggcaataact 240

ctcacgagag gcagcaggcg cgtaaattac ccaattacaa caagtagagg tagcgaagga 300

aaatatgagg ggtggcaagg tttgcctgt tacattctca aatggaagca aattagatat 360

5

gtcattg 367

<210> 77

10 <211> 257

<212> DNA

<213> Human

15 <220>

<221> misc\_feature

<222> (6)..(6)

<223> n is a, c, g, or t

20 <220>

<221> misc\_feature

<222> (11)..(11)

<223> n is a, c, g, or t

25 <400> 77

actagnacag naatttttagc taagtggagt ttgagttaag tggagatgtg agaccatctc 60

atagaaatca ttatttctgt gggatggata attgggccaa attgtaaaat attttaacta 120

30 tcagtgtttg gggtttattt ttaaaagaat aggggtgccac cagatgttct ttagtggagg 180

agaaatgagg ccagagtgcac tgcctagaaa attaagttgg taaattaatc acttttttct 240

aggtcctttc ttagtct 257

35

<210> 78

<211> 373

<212> DNA

40 <213> Human

<220>

<221> misc\_feature

45 <222> (11)..(11)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (20)..(20)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (24)..(24)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (31)..(31)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (38)..(38)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (53)..(53)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (61)..(62)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (66)..(66)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (83)..(84)  
 40 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (92)..(92)  
 45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (109)..(109)  
 <223> n is a, c, g, or t

5

<220>  
 <221> misc\_feature  
 <222> (115)..(115)  
 <223> n is a, c, g, or t

10

<220>  
 <221> misc\_feature  
 <222> (146)..(146)  
 <223> n is a, c, g, or t

15

<220>  
 <221> misc\_feature  
 <222> (153)..(153)  
 <223> n is a, c, g, or t

20

<220>  
 <221> misc\_feature  
 <222> (166)..(166)  
 <223> n is a, c, g, or t

25

<400> 78  
 ctttaaaaac ntgttagacn aacnttaaaa nttaccntt ttctgaact gantcctggg 60

nntaantaaa aagggtgaag aannttactt cncitgggtcc taaaaaacnt ttcttcagt 120

30

tattacaaa atattggac cattantaaa gantagggcc aaccnaatt ttcttgaaa 180

ttccgttaa atagccgtta aatgtttta cccatttcat attggatacc ttaaattata 240

35

ataatggatt ttattgttaa attgtgtgtg tgtggtgtgt atgccctgtc ttcttcctc 300

taccattatt gtcactttat gtttgaacc cccttacctc ttcttaaag gaaaaaaagg 360

gcccgggggtt ttt 373

40

<210> 79  
 <211> 128  
 <212> DNA  
 <213> Human

45

<220>  
 <221> misc\_feature  
 <222> (10)..(10)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (20)..(20)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (29)..(30)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (35)..(35)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (49)..(49)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (92)..(92)  
 30 <223> n is a, c, g, or t

<400> 79  
 tcctagtaan ctggttaacn ctgaaagann aagangcctc ccctgttcnc tgaaatacca 60

35 ccttgatggt caagtattta agaccctatg cnaatatttt ttaccttttc taataaacca 120

tgtttggt 128

40 <210> 80  
 <211> 213  
 <212> DNA  
 <213> Human

45 <220>



<221> misc\_feature  
<222> (9)..(9)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (88)..(88)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (98)..(98)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (105)..(105)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (107)..(107)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (127)..(127)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (142)..(142)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (147)..(147)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (161)..(161)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (166)..(167)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (171)..(171)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (180)..(180)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (196)..(196)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (206)..(206)  
<223> n is a, c, g, or t

<400> 80

25 cccattggna cagaccccca aaatgggtac atttttagg aaaccaggac cttccaagg 60

ggccaggcct tcctttaa aaaaaatnac cgttttingg gggangnaac ctttaaaagg 120

ggaaaanaaa tccttttaa anggaantcc aagggaagga ncctgnncaa nactcccn 180

30 ccaataaaaa aaacntttt ggaaangggg aaa 213

<210> 81

35 <211> 443  
<212> DNA  
<213> Human

<220>

40 <221> misc\_feature  
<222> (22)..(22)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature

<222> (33)..(34)

<223> n is a, c, g, or t

<220>

5 <221> misc\_feature

<222> (39)..(39)

<223> n is a, c, g, or t

<400> 81

10 gaaatgagat gaaaccatga gnatgaaatg aannaatgnc atgcaaata gaagatgaaa 60

tgatgaaatg agatgagatg agaagaaatg acttgatgag atgagataaa atgatgaaat 120

gaaatgaagt gaaatgaaat tgaaatgaga tgagatgaaa tgagataaaa tgatgagatg 180

15 aaatgagaag aaatgagatg aaatgatgaa atgatgagat gagatgaaaa atgatgggat 240

gagaaatgag atgaaatgat gggatgaaat gaaatgaaat aatgaaataa tgaaatgaaa 300

20 tgaattgata atattgaagt gaaattgaaa gatgagattg gatgaaatga tgagatgaaa 360

tgaaatgttg aaatgaaatg aagagatgta acatgaaatg agctgaaatg atgagatgaa 420

atgaaatgaa atgagattaa atg 443

25

<210> 82

<211> 442

<212> DNA

30 <213> Human

<220>

<221> misc\_feature

35 <222> (13)..(13)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (16)..(16)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (33)..(33)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (46)..(47)  
 5 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (78)..(78)  
 10 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (82)..(83)  
 15 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 <222> (121)..(121)  
 20 <223> n is a, c, g, or t  
  
 <400> 82  
 tggcccgga acntcnaact gccatcctg gantttggg ggggannctt taaaaaacct 60  
 25 gacctctgaa tgtattantg anncaagtga tagccaagat attttgaaga aaaatagata 120  
 ntagggacct gctctataag cccatcataa ttattatga agttataaca agtaaacag 180  
 taaggtattt ggcattggaat agagaaccca gaaacagacc caatgcatgg gtacaggata 240  
 30 taacacaggg aaatgaggga caatatatgg ttctgggata attatttata tggggaaaat 300  
 aaagaaattg gatccctacc tcacacatac aaaaaaaatc ataattgaat taaaaacttg 360  
 35 catgtgaaag gaaagacttt aaaacattta gaaaaagtat tggaggctat gatcttgggg 420  
 taggaaagca tttctttttt tt 442  
  
 40 <210> 83  
 <211> 135  
 <212> DNA  
 <213> Human  
 45 <220>

<221> misc\_feature  
 <222> (8)..(8)  
 <223> n is a, c, g, or t

5 <220>  
 <221> misc\_feature  
 <222> (36)..(36)  
 <223> n is a, c, g, or t

10 <400> 83  
 gtctaacnta aaaagtaaag aaagtaaagt aaaggnttga aggaaggaag gaaggaagga 60  
 agggaggaaa agaaagaaag gaaggaagga aggaaaagaa agaaagaaag gaaggaagga 120  
 15 aggaaggaag gaagg 135

<210> 84  
 <211> 346  
 20 <212> DNA  
 <213> Human

<220>  
 25 <221> misc\_feature  
 <222> (30)..(30)  
 <223> n is a, c, g, or t

<400> 84  
 30 ggaggaggaa gaggatgag ttctctaata acttggttgg attagccta gaggatcgg 60  
 gaggatccta ctgtaagtgc ccctactatc aagggttcat ggaaatcta ggcaaggcag 120  
 aacttcctca gaaggacaag agacaaagaa gtgggggagg ccctcctatc catagctgag 180  
 35 aggggttatt cttgtggtt ctgctgtcag agcctttgga tgtctgatct gagatggagc 240  
 aacccagct agacagaact tttagattt tgggggggtt aaaaggcctc aagcaaattc 300  
 40 taaaactttc ttgaacccc ctggcatagg ctgagttcc ctgact 346

<210> 85  
 <211> 100  
 45 <212> DNA  
 <213> Human

<400> 85

acaaaaagcc cctttaaact tgggcccgcg cgaggcgtt tcgactgggc cgagacttcc 60

5 gaaaagaaaa tggtttttt tgccgaaatc aaccgggtaa 100

<210> 86

<211> 201

10 <212> DNA

<213> Human

<400> 86

ttcataacat cgtcattttg gggtatgcga aatacaaatt taaatctttg tgaaatgaaa 60

15 gaaaagagga agaaacgctt ttaggaggtt aaggattaaa gtaaaaatta tttgacata 120

attacctctt tttgtacca ctcttaaagg ccaggaacat atttgagaa gcctagtgt 180

20 atgtaacagt gtggggtttc a 201

<210> 87

<211> 531

25 <212> DNA

<213> Human

<400> 87

tatagcgggc gttataaaca taccacttcc cgtacaacg gattcaagg ttaggggtgc 60

30 aaccacagaac gaacgcgta agtgcgcgtt atcttctag gatagagtcg gtgacgggaa 120

tcttttacc cggcactcgg gtccaccctc gcggcaccag aggtattctc cggcgagtcg 180

35 ttaaccatcg caatgccga ccgagtttaa ggaccactcc ccaccttct cattagtaa 240

ggagaacgct actttacccc atagacggag aaatcgctac tcaactacca ggcgcgcgcc 300

gtcgagtccc tcttctctc tttatgcatt tagagcgctt tcgtaagagt tttccctaga 360

40 ttttctaag cgtagcgcgt ctactccaat gtttcgta atccagcccg aactaacgcc 420

gcggaggagt cgatccgtct actcctatcc cgtcggctcg gatttactac aggagctaag 480

45 aaaacaaaa gtaccagccc taaaggaaag tcaaaggacg cccgtaaaaa a 531

<210> 88  
 <211> 530  
 <212> DNA  
 5 <213> Human  
  
 <400> 88  
 aatctcgatc gcaaataac ggcactctcc ctcttgccgc gggtttcgtc cagcgcttcc 60  
 10 cattcgggtcc agtgcctcgc cctattagcc cttagccca ccgtttctaa aactcccaga 120  
 acagccaaac cgggtccgcc aaggcctccg tcgtttata atatattccg ttacgtata 180  
 aggaacgaac ccccttcat taccacgggc ccgcgtccgc ctcttctcc attcgcaaca 240  
 15 gtctattcc ttacagctc ccgtacctgc ttccagaaca tcgcaccgcc atagtcgaaa 300  
 gatagcaaag attaccagc ttctattcct cgtcccagag ccgagtaaatt cgaagtttat 360  
 20 agaggcggaa tccaaccatt caagagttat aacaagttat cggcactcgg gggatcagaa 420  
 tataaactta atgtcccctt tattctcccg gacgcccctt ttaaccactt ctctctatct 480  
 ttgcctaaca agccattgac ggcgctttgc cgcgcggggc catctcgcgt 530  
 25  
  
 <210> 89  
 <211> 332  
 <212> DNA  
 30 <213> Human  
  
 <220>  
 <221> misc\_feature  
 35 <222> (37)..(37)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 40 <222> (47)..(47)  
 <223> n is a, c, g, or t  
  
 <220>  
 <221> misc\_feature  
 45 <222> (108)..(108)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (112)..(112)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (129)..(129)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (134)..(134)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (152)..(152)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (168)..(168)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (196)..(196)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (239)..(239)  
 35 <223> n is a, c, g, or t

<400> 89  
 ccatttatgg gccggggata taccacatg gtacagnaca ttacatnttt atggcaccat 60  
 40 ttccaccggc ctggttttgg ttttccata attaattaac caggggggncc anttaaaaaa 120  
 aattaaggna aggnttaaaa aatttaacca anggggggtt taaagggnntt tttttttta 180  
 aaaaaaaagg ttaaanccccc ccctttttt ttgggttggg gtgggaaaat ttgggaanc 240  
 45 cttaaccccc gggtttttgg gtttttttgg ccaaaacccc ccggaaaaaa attaaaaaaa 300



ggaccggttt ccattttaat gggatttggg aa

332

5 <210> 90  
<211> 185  
<212> DNA  
<213> Human

10 <400> 90  
actgctataa tgcaggggaa catgttctca gggatcatcct gaggggttgt gtcattggggc 60

cgggtggaac tattaaaaca taagttaat cggattttaa aattttaaaa tcaaaaaaaaa 120

15 taaaatatat gcaaccctcc attccaagga agtatgatgt tactagatta tctgaaaatt 180

ctcct 185

20 <210> 91  
<211> 365  
<212> DNA  
<213> Human

25 <220>  
<221> misc\_feature  
<222> (326)..(326)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (338)..(339)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (344)..(344)  
<223> n is a, c, g, or t

40 <400> 91  
ccagagagcc acaaatgacc aaaatatttt gagatgaaca tgctcgtaga aggtagctga 60

ctagggggga ctgaaaatg ctgaccagg ataactccta agtgtatatc ctggcgagac 120

45 tcgttatgct ttccaatcct gcttgcaata taagacacaa agtcagaata aagctcaaga 180

aaacagaacg tgcaggccat caagcgcaga gcctgctcat tggacaaccg caaagagtag 240

taagtgtgc cgctattcac acttagaaaa ggagaaccac ggggaaaaac caaattaatg 300

5

gggctgcttt ttgtactct ggcatnagag aattgtgnng aaanttiaac tttgtaagc 360

ttgta 365

10

<210> 92  
<211> 113  
<212> DNA  
<213> Human

15

<220>  
<221> misc\_feature  
<222> (32)..(32)  
20 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (34)..(34)  
25 <223> n is a, c, g, or t

<400> 92  
acttgacctt atggatgatg ctgcggagtg cntngtaagt gtttcatgat attcctaag 60

30 aagtcaggat agtagtttc attccttaga tggtaacaagt gttgagacaa atg 113

<210> 93  
<211> 210  
35 <212> DNA  
<213> Human

<400> 93  
gttttaggga aattgccag ttttatgttt taatatTTTT ggaaggaaaa ctgaaaggta 60

40

atgaaaatgt tactgttgga ttaaaaaaca aattaagtcc aaatagtgat taggcaagtt 120

ggtgaggtag ggggttgctg caagagcgga agttgaaaga tcttgaaaa attaaagaaa 180

45 cttcatagaa ccccatctct acaccaaaaa 210

<210> 94  
 <211> 506  
 <212> DNA  
 5 <213> Human

<220>  
 <221> misc\_feature  
 10 <222> (5)..(5)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 15 <222> (25)..(25)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 20 <222> (38)..(39)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 25 <222> (44)..(44)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 30 <222> (46)..(46)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 35 <222> (59)..(59)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 40 <222> (66)..(66)  
 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 45 <222> (70)..(70)  
 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (74)..(74)  
5 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (80)..(80)  
10 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (82)..(84)  
15 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (86)..(86)  
20 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (90)..(92)  
25 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (112)..(113)  
30 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (117)..(117)  
35 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (126)..(126)  
40 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (129)..(129)  
45 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (133)..(136)  
 <223> n is a, c, g, or t  
 5  
 <220>  
 <221> misc\_feature  
 <222> (152)..(152)  
 <223> n is a, c, g, or t  
 10  
 <220>  
 <221> misc\_feature  
 <222> (156)..(157)  
 <223> n is a, c, g, or t  
 15  
 <220>  
 <221> misc\_feature  
 <222> (162)..(162)  
 <223> n is a, c, g, or t  
 20  
 <220>  
 <221> misc\_feature  
 <222> (164)..(165)  
 <223> n is a, c, g, or t  
 25  
 <220>  
 <221> misc\_feature  
 <222> (174)..(174)  
 <223> n is a, c, g, or t  
 30  
 <220>  
 <221> misc\_feature  
 <222> (178)..(178)  
 <223> n is a, c, g, or t  
 35  
 <220>  
 <221> misc\_feature  
 <222> (181)..(181)  
 <223> n is a, c, g, or t  
 40  
 <220>  
 <221> misc\_feature  
 <222> (185)..(187)  
 <223> n is a, c, g, or t  
 45  
 <220>

<221> misc\_feature  
<222> (190)..(191)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (194)..(194)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (206)..(206)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (227)..(227)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (231)..(231)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (235)..(235)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (244)..(244)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (247)..(247)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (251)..(251)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (255)..(255)  
 <223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
 <222> (258)..(258)  
 <223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
 <222> (260)..(261)  
 <223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
 <222> (263)..(263)  
 <223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
 <222> (270)..(270)  
 <223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
 <222> (273)..(276)  
 <223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
 <222> (285)..(285)  
 <223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
 <222> (287)..(287)  
 <223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
 <222> (291)..(292)  
 <223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
 <222> (302)..(302)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (305)..(306)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (311)..(311)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (318)..(319)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (321)..(321)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (327)..(329)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (333)..(333)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (348)..(349)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (352)..(352)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (357)..(357)

<223> n is a, c, g, or t



<220>  
 <221> misc\_feature  
 <222> (363)..(363)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (366)..(367)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (369)..(369)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (371)..(371)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (376)..(377)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (385)..(385)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (390)..(390)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (398)..(398)  
 40 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (401)..(401)  
 45 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (405)..(405)  
<223> n is a, c, g, or t

5

<220>  
<221> misc\_feature  
<222> (420)..(420)  
<223> n is a, c, g, or t

10

<220>  
<221> misc\_feature  
<222> (429)..(429)  
<223> n is a, c, g, or t

15

<220>  
<221> misc\_feature  
<222> (437)..(437)  
<223> n is a, c, g, or t

20

<220>  
<221> misc\_feature  
<222> (440)..(440)  
<223> n is a, c, g, or t

25

<220>  
<221> misc\_feature  
<222> (442)..(443)  
<223> n is a, c, g, or t

30

<220>  
<221> misc\_feature  
<222> (453)..(453)  
<223> n is a, c, g, or t

35

<220>  
<221> misc\_feature  
<222> (455)..(456)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (473)..(474)  
<223> n is a, c, g, or t

45

<220>

<221> misc\_feature  
<222> (477)..(477)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (481)..(481)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (487)..(488)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (495)..(497)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (500)..(500)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (502)..(502)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (506)..(506)  
<223> n is a, c, g, or t

35 <400> 94  
ttggnggggg ggcgagatcc tactngagac ccttgatnnt gggnganggac cgaagatcna 60  
ttaganaccn atngatggn cnnncnaaan nnttaaagtg agagtccatc tnngaanaaa 120  
40 atgggnaant ttnnnngggg ggggggaaaa ancccnnggg tnannggggg ccnngggntt 180  
naaannggn nctngggggg ggaaantttt ggccccccc cgggggnttt ncctnaaaaa 240  
aaancnttt naaanacngn nanaatttn ccnnncggg gagngngga nntttttt 300  
45 tnaannagcc nttttgna naaaaannnt ggnccccc ctattccnng gnttttngga 360

ccntnnanc ntgggnnttt ttagncttn aaaaaaangc naatnttaag gtaaaaattn 420

ggggggggng ggggggnggn gnntttttt ttntnnggag gggttttt ccnncgnggg 480

5

ngaaagnntg gggcnntcn cngccn 506

<210> 95

10 <211> 400

<212> DNA

<213> Human

15 <220>

<221> misc\_feature

<222> (11)..(11)

<223> n is a, c, g, or t

20 <220>

<221> misc\_feature

<222> (24)..(24)

<223> n is a, c, g, or t

25 <220>

<221> misc\_feature

<222> (40)..(40)

<223> n is a, c, g, or t

30 <220>

<221> misc\_feature

<222> (48)..(48)

<223> n is a, c, g, or t

35 <220>

<221> misc\_feature

<222> (51)..(51)

<223> n is a, c, g, or t

40 <220>

<221> misc\_feature

<222> (71)..(71)

<223> n is a, c, g, or t

45 <220>

<221> misc\_feature

<222> (80)..(80)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (83)..(83)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (91)..(91)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (95)..(95)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (99)..(99)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (111)..(111)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (115)..(116)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (118)..(118)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (121)..(121)  
<223> n is a, c, g, or t

<220>

45 <221> misc\_feature  
<222> (123)..(124)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

5 <222> (126)..(126)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

10 <222> (129)..(129)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

15 <222> (131)..(131)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

20 <222> (133)..(133)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

25 <222> (135)..(135)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

30 <222> (148)..(148)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

35 <222> (153)..(153)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

40 <222> (170)..(170)

<223> n is a, c, g, or t

<220>

<221> misc\_feature

45 <222> (173)..(173)

<223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (175)..(175)  
 5 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (177)..(177)  
 10 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (192)..(192)  
 15 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (195)..(196)  
 20 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (198)..(198)  
 25 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (200)..(201)  
 30 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (211)..(212)  
 35 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (219)..(219)  
 40 <223> n is a, c, g, or t

<220>  
 <221> misc\_feature  
 <222> (222)..(223)  
 45 <223> n is a, c, g, or t

<220>  
<221> misc\_feature  
<222> (226)..(226)  
<223> n is a, c, g, or t

5

<220>  
<221> misc\_feature  
<222> (231)..(231)  
<223> n is a, c, g, or t

10

<220>  
<221> misc\_feature  
<222> (240)..(240)  
<223> n is a, c, g, or t

15

<220>  
<221> misc\_feature  
<222> (243)..(244)  
<223> n is a, c, g, or t

20

<220>  
<221> misc\_feature  
<222> (249)..(249)  
<223> n is a, c, g, or t

25

<220>  
<221> misc\_feature  
<222> (255)..(255)  
<223> n is a, c, g, or t

30

<220>  
<221> misc\_feature  
<222> (269)..(269)  
<223> n is a, c, g, or t

35

<220>  
<221> misc\_feature  
<222> (280)..(280)  
<223> n is a, c, g, or t

40

<220>  
<221> misc\_feature  
<222> (283)..(283)  
<223> n is a, c, g, or t

45

<220>



<221> misc\_feature  
<222> (289)..(289)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (293)..(293)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (311)..(311)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (324)..(324)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (326)..(326)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (341)..(341)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (348)..(348)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (350)..(350)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (354)..(355)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (367)..(367)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (383)..(384)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (391)..(391)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (398)..(398)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (400)..(400)  
<223> n is a, c, g, or t

<400> 95

25 catgaaggaa naagcctgta ctanctgccg gtatccatgn taatctgngg ngatgtcagc 60  
agaccagct nagcagatan ctncatttct ntcnaagnc ctttggctctg naggngnca 120  
ntnnanctnc ngntnaacat cacagctnct ccnagcatca ccctgctagn tancngnggg 180  
30 ttttctctta tntgnngncn naacatctgc nngctctgnt annaanaatt ncataccgcn 240  
canngtctnt gacgntgtga tgcatacgnt tgggcagagn gancaatang tgngcatatg 300  
35 cgtgccttac ncaaggatac ggangngctt gaaattgatg ngaccaanan tttnngtacg 360  
gtaagtnacc caaccacttc tgnnttcaact ntaagagncn 400

40 <210> 96  
<211> 800  
<212> DNA  
<213> Human

45 <220>

<221> misc\_feature  
<222> (171)..(171)  
<223> n is a, c, g, or t

5 <220>  
<221> misc\_feature  
<222> (622)..(622)  
<223> n is a, c, g, or t

10 <220>  
<221> misc\_feature  
<222> (628)..(628)  
<223> n is a, c, g, or t

15 <220>  
<221> misc\_feature  
<222> (642)..(642)  
<223> n is a, c, g, or t

20 <220>  
<221> misc\_feature  
<222> (661)..(661)  
<223> n is a, c, g, or t

25 <220>  
<221> misc\_feature  
<222> (668)..(668)  
<223> n is a, c, g, or t

30 <220>  
<221> misc\_feature  
<222> (694)..(694)  
<223> n is a, c, g, or t

35 <220>  
<221> misc\_feature  
<222> (709)..(710)  
<223> n is a, c, g, or t

40 <220>  
<221> misc\_feature  
<222> (735)..(735)  
<223> n is a, c, g, or t

45 <220>  
<221> misc\_feature

<222> (751)..(752)  
<223> n is a, c, g, or t

<220>

5 <221> misc\_feature  
<222> (763)..(763)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (778)..(778)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (782)..(782)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (786)..(786)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (788)..(788)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (798)..(798)  
<223> n is a, c, g, or t

<400> 96

35 gagatgaatg atgaaatgat gagatgagat gatgaaatga aatggtgaga tgaactgatg 60

aaatgaaatg aaataatgaa atgaaattga aataaaattg aaatgagatg agatgaaatg 120

atgagatgat gaaataaaat gatgaaatga gatgtgatga gatgaaatga ngagatgaaa 180

40 tgatgagatg agatgacatg aaataaatga aataatgaaa tcgaaatgag atgagaagat 240

acgagatgag atgaaatgat gagatgaaat gatgaaatga gataagatga aaagagttga 300

45 tgagatgatg agatgaaatg agatgaaaag agatgaaatg agatgaaatg aaatgatgag 360

atgaaatgag gtgaaatgaa attagatgaa acgtaatgag atgaaatgac ataatgaaat 420  
 . gaaaaaatga aatgaaataa tgaaatgagg tgaaattaaa tgagatgatg aaattaaatg 480  
 5 atgaaatgaa ataatgaaat ggaaatgaaa tggaaatgat gagatgaatg atgagatgaa 540  
 atgatgagat gagatgtatt gatgagagga aatgatgaga tgtaatgaaa tgagatgaaa 600  
 tgaatgagat gaaatggaat antggaangg aaattgattg gngatttgag atgaaatgag 660  
 10 ntaaatgnga tgaattaatg atgagatgaa atgntgaatg ccggggtggn tgagatgaat 720  
 tgagttgaac cctgngatga atgaagattg nntgaatggt ggntgaatgt tgaatggntg 780  
 15 gntggnanaa tgcctgtngg 800

<210> 97  
 <211> 334  
 20 <212> DNA  
 <213> Human

<400> 97  
 gatgaattga aatgaaatga aataatgaaa taatgaaatg agatgaaatg aaaagaaatg 60  
 25 atgaaatgat attgaaatga aattgaaaga tgagatgatg agatgaaatg gtgaaatgtt 120  
 gaaatgaaat gatgaaatga atagatgtga catgaaatga gctgaaatga tgagatcaaa 180  
 30 tgaaatgaaa tgagattaaa tgatgagatg aaaactgatg aaaacttaaa tgatgaaata 240  
 atgaaatgaa aatgaaatgg aatgatgag atgagaagaa atgatgagat gagatgagat 300  
 aaaatgagat gaaatgatga gatgaaatga tgag 334  
 35

<210> 98  
 <211> 100  
 <212> DNA  
 40 <213> Human

<220>  
 <221> misc\_feature  
 45 <222> (17)..(17)  
 <223> n is a, c, g, or t

<400> 98

ttcaggccgt ctgctntac atatactatc gagaatgggtg ctgtgcactc ataacaccgt 60

5 tgcttggttag acgcttttga acccttcagc gctgaaagta 100

<210> 99

<211> 500

10 <212> DNA

<213> Human

<220>

15 <221> misc\_feature

<222> (8)..(8)

<223> n is a, c, g, or t

<220>

20 <221> misc\_feature

<222> (361)..(361)

<223> n is a, c, g, or t

<400> 99

25 cccggggaatt cgcccttat ggccggggga aatgatgaga tgaaatgatg aatgagata 60

agatgaaaag agttgatgag atgatgagat gaaatgagat gaaaagagat gaaatgagat 120

gaaatgaaat gatgagatga aatgaggatga aatgaaatta gatgaaacgt aatgagatga 180

30 aatgacctaa tgaaatgaaa aatgaaatg aaataatgaa atgaggatgaa attaatgag 240

atgatgaaat taaatgatga aatgaaataa tgaaatggaa atgaaatgga aatgatgaga 300

35 tgaatgatga gatgaaatga tgagatgaga tctaataatg agaggagatg atgagatgaa 360

ntgagatgaa aagagatgaa atgagatgaa accgaaatga tgagatgaaa tgaggatgaaa 420

tgaattaga tgaaacgtaa tgagatgaaa tgacataatg aatgaaaaa atgaaatgaa 480

40 ataataatgaaat gaggtgaaat 500

<210> 100

45 <211> 397

<212> DNA

<213> Human

<220>

5 <221> misc\_feature  
<222> (8)..(8)  
<223> n is a, c, g, or t

<220>

10 <221> misc\_feature  
<222> (39)..(39)  
<223> n is a, c, g, or t

<220>

15 <221> misc\_feature  
<222> (50)..(50)  
<223> n is a, c, g, or t

<220>

20 <221> misc\_feature  
<222> (56)..(56)  
<223> n is a, c, g, or t

<220>

25 <221> misc\_feature  
<222> (71)..(72)  
<223> n is a, c, g, or t

<220>

30 <221> misc\_feature  
<222> (97)..(97)  
<223> n is a, c, g, or t

<220>

35 <221> misc\_feature  
<222> (110)..(110)  
<223> n is a, c, g, or t

<220>

40 <221> misc\_feature  
<222> (177)..(177)  
<223> n is a, c, g, or t

<400> 100

45 cccgggagnt ttaagtagg gggcctgccc cttaagcnt agtcccacn tgaaanacac 60

tccccttgaa nntctctaaa ccttaacttt ctggccnttt tgttcagan atgcctaacc 120  
 ctcagggggt cttttgttct ctacgcctaa aaacttaate tgtttggaac aattccttt 180  
 5 cctctctgta gaaattgacc tggccatggc tcctgtgaat gatacggttg ctattatccc 240  
 tgaacactgt aaaaatgaac ttgaaacag ttgggttagga cccaaacaga aaatgatgta 300  
 tggcttgga atagtttagc tgaacattat gctttaatat ttactggcc attgcagcac 360  
 10 aggtttagaa atttatgttc ggctttttaa agtttta 397

<210> 101  
 15 <211> 132  
 <212> DNA  
 <213> Human

20 <220>  
 <221> misc\_feature  
 <222> (121)..(121)  
 <223> n is a, c, g, or t

25 <400> 101  
 gttaccta atgtttactct cattttctt ttctttattt ttcatttga aaataggaac 60  
 attaatgta ctactttcaa aagaattaat tgaagaaaga gagatacagg gtatctaggc 120  
 30 ngaggaagac cc 132

<210> 102  
 <211> 246  
 35 <212> DNA  
 <213> Human

<400> 102  
 gggggcttta gttataactg ggctaagcat aattgcgcta ccaattccat attatctcat 60  
 40 ggcactta atttataattg atatatataa taaaaaatc aatgcagata ttgatataat 120  
 aaaaatagat aatggtaac caagcacgat ggtagccatc actctaattg ctttgggggt 180  
 45 aacctataac ttattaagta aagtgccaga atggttcttt gacagtatta aaattaaaga 240



aaacag

246

- 5 <210> 103  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence
- <220>  
 10 <223> forward primer of exon 1 of insulin gene used for quantitative RT-PCR analysis
- <220>  
 15 <221> primer\_bind  
 <222> (1)..(18)
- <400> 103  
 gccctctggg gacctgac 18  
 20
- <210> 104  
 <211> 18  
 <212> DNA  
 25 <213> Artificial Sequence
- <220>  
 <223> reverse primer of exons 1 and 2 of insulin gene used for quantitative RT-PCR analysis  
 30
- <220>  
 <221> primer\_bind  
 <222> (1)..(18)  
 35
- <400> 104  
 cccacctgca ggtcctct 18
- 40 <210> 105  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence
- 45 <220>  
 <223> forward primer of  $\beta$ MyHC gene used for quantitative RT-PCR

analysis

<220>

5 <221> primer\_bind

<222> (1)..(24)

<400> 105

gctggaacgt agagactccc tgct

24

10

<210> 106

<211> 24

<212> DNA

15 <213> Artificial Sequence

<220>

<223> reverse primer of  $\beta$ MyHC gene used for quantitative RT-PCR  
analysis

20

<220>

<221> primer\_bind

<222> (1)..(24)

25

<400> 106

ggatccttcc agatcatcca ctg

24

30 <210> 107

<211> 20

<212> DNA

<213> Artificial Sequence

35 <220>

<223> forward primer of ANF used for quantitative RT-PCR analysis

<220>

40 <221> primer\_bind

<222> (1)..(20)

<400> 107

ggatttcaag aatttgctgg

20

45

<210> 108  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

5

<220>  
 <223> reverse primer of ANF used for quantitative RT-PCR analysis

10 <220>  
 <221> primer\_bind  
 <222> (1)..(20)

<400> 108  
 15 gcagatcgat cagaggagtc 20

<210> 109  
 <211> 20  
 20 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> forward primer of APP used for quantitative RT-PCR analysis  
 25

<220>  
 <221> primer\_bind  
 <222> (1)..(20)  
 30  
 <400> 109  
 ggatgcttca tgtgaacgtg 20

35 <210> 110  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

40 <220>  
 <223> reverse primer of APP used for quantitative RT-PCR analysis

<220>  
 45 <221> primer\_bind  
 <222> (1)..(19)

<400> 110  
tcattcacac cagcacatg

19

5

<210> 111  
<211> 21  
<212> DNA  
<213> Artificial Sequence

10

<220>  
<223> forward primer of ZFP used for quantitative RT-PCR analysis

15

<220>  
<221> primer\_bind  
<222> (1)..(21)

20

<400> 111  
cacargagrc arggtcaacg a

21

25

<210> 112  
<211> 22  
<212> DNA  
<213> Artificial Sequence

30

<220>  
<223> reverse primer of ZFP used for quantitative RT-PCR analysis

35

<220>  
<221> primer\_bind  
<222> (1)..(22)  
<400> 112  
ggattaaaat gaagcaccca ga

22